Preface

This manual is intended for use as a textbook, working book and reference book for patent searching on STN International. It is designed to simplify access to online patent information for the expert searcher having knowledge of the patent sector, and also to brush up the occasional user's knowledge of special features in patent searching.

The manual is arranged as follows:

- The Introduction presents the main types of on-line patent searches in compact form. The tabular Overview of the databases and types of searches helps identify the sections of interest when preparing a patent search.
- The short description of STN patent databases is not meant to replace the database sheets but to complement them with certain details that are of particular interest in patent searches.
- Another chapter deals with the most essential Types of search, as far as possible covering all relevant databases and pointing out specific features of the individual databases.
- These are illustrated by the Search examples, representing the basic strategies for searching.
- Finally, some Surveys are presented which proved to be useful in practical work.

When a search problem arises it is advisable to first consult the Introduction to identify the type of search and sections to be read, then to obtain information about the contents and important special features of the selected databases (Patent databases on STN International), then to read the notes on the search type in general and special features of the database (Types of search), and finally to work on the corresponding examples (Search examples). And always consult a current database list before starting your search.
# Table of contents

**Introduction** 15

1 **Steps to conduct a patent search** 16
   1.1 Before the search ................................................................. 16
   1.2 The actual search ................................................................. 17
   1.3 After the search ...................................................................... 17

2 **Typical searches and types of search** 18

3 **Overview: Search options available in STN databases** 19
   3.1 Bibliographic patent files (international) .................................. 20
   3.2 Bibliographic patent files (national) ......................................... 21
   3.3 Fulltext files .......................................................................... 22
   3.4 Patent databases with specific subject coverage (international) .... 25
   3.5 Patent databases with specific subject coverage (national) ......... 26
   3.6 Files with patent classifications and references .......................... 27

**Patent databases on STN International** 29

4 **The dynamics of the patent procedure** 30
   4.1 Static principle ........................................................................ 30
   4.2 Dynamic Principle ................................................................... 30
   4.3 Mixed principles ...................................................................... 30

5 **AUPATFULL** 33
   5.1 Typical queries ........................................................................ 33
   5.2 Brief description ....................................................................... 33
   5.3 Contents ................................................................................. 33
   5.4 Dynamics ................................................................................. 34
   5.5 Updating ................................................................................. 34
   5.6 Document from AUPATFULL .................................................. 34
   5.7 Selected Fields ........................................................................ 36

6 **CANPATFULL** 37
   6.1 Typical queries ........................................................................ 37
   6.2 Brief description ....................................................................... 37
   6.3 Contents ................................................................................. 37
   6.4 Dynamics ................................................................................. 38
   6.5 Updating ................................................................................. 38
   6.6 Document from CANPATFULL ................................................ 38
   6.7 Selected Fields ........................................................................ 41

7 **Chemical Abstracts Plus (CAplus)** 42
   7.1 Typical queries ........................................................................ 42
   7.2 Brief description ....................................................................... 42
   7.3 Contents ................................................................................. 42
   7.4 Dynamics ................................................................................. 43
   7.5 Updating ................................................................................. 44
   7.6 Notes ...................................................................................... 44
   7.7 Document from HCAplus ....................................................... 44
   7.8 Selected Fields ........................................................................ 46
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>CNFULL</td>
<td>48</td>
</tr>
<tr>
<td>8.1</td>
<td>Typical queries</td>
<td>48</td>
</tr>
<tr>
<td>8.2</td>
<td>Brief description</td>
<td>48</td>
</tr>
<tr>
<td>8.3</td>
<td>Contents</td>
<td>48</td>
</tr>
<tr>
<td>8.4</td>
<td>Dynamics</td>
<td>49</td>
</tr>
<tr>
<td>8.5</td>
<td>Updating</td>
<td>49</td>
</tr>
<tr>
<td>8.6</td>
<td>Document from CNFULL</td>
<td>49</td>
</tr>
<tr>
<td>8.7</td>
<td>Selected Fields</td>
<td>52</td>
</tr>
<tr>
<td>9</td>
<td>DEFULL</td>
<td>53</td>
</tr>
<tr>
<td>9.1</td>
<td>Typical queries</td>
<td>53</td>
</tr>
<tr>
<td>9.2</td>
<td>Brief description</td>
<td>53</td>
</tr>
<tr>
<td>9.3</td>
<td>Contents</td>
<td>53</td>
</tr>
<tr>
<td>9.4</td>
<td>Dynamics</td>
<td>54</td>
</tr>
<tr>
<td>9.5</td>
<td>Updating</td>
<td>54</td>
</tr>
<tr>
<td>9.6</td>
<td>Document from DEFULL</td>
<td>54</td>
</tr>
<tr>
<td>9.7</td>
<td>Selected Fields</td>
<td>57</td>
</tr>
<tr>
<td>10</td>
<td>Derwent Geneseq (DGENE)</td>
<td>58</td>
</tr>
<tr>
<td>10.1</td>
<td>Brief description</td>
<td>58</td>
</tr>
<tr>
<td>10.2</td>
<td>Contents</td>
<td>58</td>
</tr>
<tr>
<td>10.3</td>
<td>Dynamics</td>
<td>58</td>
</tr>
<tr>
<td>10.4</td>
<td>Updating</td>
<td>58</td>
</tr>
<tr>
<td>10.5</td>
<td>Document from DGENE</td>
<td>59</td>
</tr>
<tr>
<td>10.6</td>
<td>Selected Fields</td>
<td>60</td>
</tr>
<tr>
<td>11</td>
<td>Derwent Patents Citation Index (DPCI)</td>
<td>61</td>
</tr>
<tr>
<td>11.1</td>
<td>Typical queries</td>
<td>61</td>
</tr>
<tr>
<td>11.2</td>
<td>Brief description</td>
<td>61</td>
</tr>
<tr>
<td>11.3</td>
<td>Contents</td>
<td>61</td>
</tr>
<tr>
<td>11.4</td>
<td>Dynamics</td>
<td>62</td>
</tr>
<tr>
<td>11.5</td>
<td>Updating</td>
<td>62</td>
</tr>
<tr>
<td>11.6</td>
<td>Document from DPCI</td>
<td>62</td>
</tr>
<tr>
<td>11.7</td>
<td>Selected Fields</td>
<td>63</td>
</tr>
<tr>
<td>12</td>
<td>Derwent World Patents Index (WPINDEX, WPIDS, WPIX)</td>
<td>64</td>
</tr>
<tr>
<td>12.1</td>
<td>Typical queries</td>
<td>64</td>
</tr>
<tr>
<td>12.2</td>
<td>Brief description</td>
<td>64</td>
</tr>
<tr>
<td>12.3</td>
<td>Contents</td>
<td>64</td>
</tr>
<tr>
<td>12.4</td>
<td>Dynamics</td>
<td>68</td>
</tr>
<tr>
<td>12.5</td>
<td>Updating</td>
<td>68</td>
</tr>
<tr>
<td>12.6</td>
<td>Document from World Patents Index</td>
<td>68</td>
</tr>
<tr>
<td>12.7</td>
<td>Selected Fields</td>
<td>72</td>
</tr>
<tr>
<td>13</td>
<td>ENCOMPPAT/ENCOMPPAT2</td>
<td>74</td>
</tr>
<tr>
<td>13.1</td>
<td>Typical queries</td>
<td>74</td>
</tr>
<tr>
<td>13.2</td>
<td>Brief description</td>
<td>74</td>
</tr>
<tr>
<td>13.3</td>
<td>Contents</td>
<td>74</td>
</tr>
<tr>
<td>13.4</td>
<td>Document from ENCOMPPAT2</td>
<td>75</td>
</tr>
<tr>
<td>13.5</td>
<td>Selected Fields</td>
<td>75</td>
</tr>
<tr>
<td>14</td>
<td>EPFULL</td>
<td>77</td>
</tr>
<tr>
<td>14.1</td>
<td>Typical queries</td>
<td>77</td>
</tr>
<tr>
<td>14.2</td>
<td>Brief description</td>
<td>77</td>
</tr>
<tr>
<td>14.3</td>
<td>Contents</td>
<td>77</td>
</tr>
</tbody>
</table>
## Guide to STN Patent Databases

14.4 Dynamics ........................................................................................................... 78
14.5 Updating ............................................................................................................. 78
14.6 Document from EPFULL ..................................................................................... 78
14.7 Selected Fields ................................................................................................. 83

15 FRANCEPAT 85
15.1 Typical queries ................................................................................................. 85
15.2 Brief description ............................................................................................... 85
15.3 Contents ........................................................................................................... 85
15.4 Dynamics ........................................................................................................ 86
15.5 Updating .......................................................................................................... 86
15.6 Document from FRANCEPAT ............................................................................ 86
15.7 Selected Fields ................................................................................................. 88

16 FRFULL 89
16.1 Typical queries ................................................................................................. 89
16.2 Brief description ............................................................................................... 89
16.3 Contents ........................................................................................................... 89
16.4 Dynamics ........................................................................................................ 90
16.5 Updating .......................................................................................................... 90
16.6 Document from FRFULL .................................................................................. 90
16.7 Selected Fields ................................................................................................. 93

17 GBFULL 94
17.1 Typical queries ................................................................................................. 94
17.2 Brief description ............................................................................................... 94
17.3 Contents ........................................................................................................... 94
17.4 Dynamics ........................................................................................................ 95
17.5 Updating .......................................................................................................... 95
17.6 Document from GBFULL .................................................................................. 95
17.7 Selected Fields ................................................................................................. 98

18 IFIALL 99
18.1 Typical queries ................................................................................................. 99
18.2 Brief description ............................................................................................... 99
18.3 Contents ........................................................................................................... 99
18.4 Dynamics ........................................................................................................ 100
18.5 Updating .......................................................................................................... 100
18.6 Documents from IFIPAT .................................................................................. 100
18.7 Selected Fields ................................................................................................. 106

19 IFICLS 107
19.1 Typical queries ................................................................................................. 107
19.2 Brief description ............................................................................................... 107
19.3 Contents ........................................................................................................... 107
19.4 Dynamics ........................................................................................................ 107
19.5 Updating .......................................................................................................... 107
19.6 Documents from IFICLS .................................................................................. 107
19.7 Selected Fields ................................................................................................. 110

20 IMSPATENTS 111
20.1 Typical queries ................................................................................................. 111
20.2 Brief description ............................................................................................... 111
20.3 Contents ........................................................................................................... 111
20.4 Dynamics ........................................................................................................ 111
Guide to STN Patent Databases

20.5 Document from IMSPATENTS ................................................................. 112
20.6 Selected Fields ..................................................................................... 115

21 INFULL .............................. 116
21.1 Typical queries .................................................................................. 116
21.2 Brief description ............................................................................... 116
21.3 Contents ............................................................................................ 116
21.4 Dynamics ........................................................................................... 117
21.5 Updating ............................................................................................. 117
21.6 Document from INFULL ................................................................. 117
21.7 Selected fields ................................................................................. 120

22 INPADOCDB / INPAFAMDB .............................................................. 121
22.1 Typical queries .................................................................................. 121
22.2 Brief description ............................................................................... 121
22.3 Contents ............................................................................................ 122
22.4 Dynamics ........................................................................................... 123
22.5 Updating ............................................................................................. 123
22.6 Documents from INPADOCDB ....................................................... 123
22.7 Document from INPAFAMDB .......................................................... 129
22.8 When to use which database ............................................................ 130
22.9 Selected Fields ................................................................................. 131

23 JAPIO ................................................................. 133
23.1 Typical queries .................................................................................. 133
23.2 Brief description ............................................................................... 133
23.3 Contents ............................................................................................ 133
23.4 Dynamics ........................................................................................... 133
23.5 Updating ............................................................................................. 133
23.6 Documents from JAPIO ................................................................. 134
23.7 Selected Fields ................................................................................. 135

24 JPFULL ............................................................. 136
24.1 Typical queries .................................................................................. 136
24.2 Brief description ............................................................................... 136
24.3 Contents ............................................................................................ 136
24.4 Dynamics ........................................................................................... 137
24.5 Updating ............................................................................................. 137
24.6 Document from JPFULL ................................................................. 137
24.7 Selected fields ................................................................................. 139

25 KOREAPAT ......................................................... 140
25.1 Typical queries .................................................................................. 140
25.2 Brief description ............................................................................... 140
25.3 Contents ............................................................................................ 140
25.4 Dynamics ........................................................................................... 140
25.5 Updating ............................................................................................. 140
25.6 Document from KOREAPAT .......................................................... 141
25.7 Selected fields ................................................................................. 142

26 LITALERT ......................................................... 143
26.1 Brief description ............................................................................... 143
26.2 Contents ............................................................................................ 143
26.3 Dynamics ........................................................................................... 143
26.4 Documents from LITALERT .......................................................... 143
### Guide to STN Patent Databases

#### 26.5 Selected fields ................................................................. 144

#### 27 PATDD  145
- 27.1 Typical queries ................................................................. 145
- 27.2 Brief description ................................................................. 145
- 27.3 Contents ................................................................. 145
- 27.4 Dynamics ................................................................. 145
- 27.5 Updating ................................................................. 146
- 27.6 Document from PATDD ................................................................. 146
- 27.7 Selected fields ................................................................. 147

#### 28 PATDPA  149
- 28.1 Typical queries ................................................................. 149
- 28.2 Brief description ................................................................. 149
- 28.3 Contents ................................................................. 149
- 28.4 Dynamics ................................................................. 151
- 28.5 Updating ................................................................. 152
- 28.6 Document from PATDPA ................................................................. 152
- 28.7 Selected fields ................................................................. 155

#### 29 PATDPAFULL  156
- 29.1 Typical queries ................................................................. 156
- 29.2 Brief description ................................................................. 156
- 29.3 Contents ................................................................. 156
- 29.4 Dynamics ................................................................. 157
- 29.5 Updating ................................................................. 157
- 29.6 Document from PATDPAFULL ................................................................. 157
- 29.7 Selected fields ................................................................. 161

#### 30 PATDPASPC  162
- 30.1 Typical queries ................................................................. 162
- 30.2 Brief description ................................................................. 162
- 30.3 Contents ................................................................. 162
- 30.4 Dynamics ................................................................. 162
- 30.5 Updating ................................................................. 162
- 30.6 Documents from PATDPASPC ................................................................. 163
- 30.7 Selected fields ................................................................. 164

#### 31 PCTFULL  165
- 31.1 Typical queries ................................................................. 165
- 31.2 Brief description ................................................................. 165
- 31.3 Contents ................................................................. 165
- 31.4 Dynamics ................................................................. 166
- 31.5 Updating ................................................................. 166
- 31.6 Document from PCTFULL ................................................................. 166
- 31.7 Selected fields ................................................................. 169

#### 32 PCTGEN  170
- 32.1 Brief description ................................................................. 170
- 32.2 Contents ................................................................. 170
- 32.3 Dynamics ................................................................. 170
- 32.4 Updating ................................................................. 170
- 32.5 Document from PCTGEN ................................................................. 171
- 32.6 Selected Fields ................................................................. 171
Guide to STN Patent Databases

33 RDISCLOSURE 172
33.1 Typical queries ................................................................................................................ 172
33.2 Brief description ................................................................................................................ 172
33.3 Contents ............................................................................................................................ 172
33.4 Dynamics .......................................................................................................................... 173
33.5 Updating ............................................................................................................................ 173
33.6 Document from RDISCLOSURE ..................................................................................... 173
33.7 Selected Fields ................................................................................................................... 175

34 RUSSIAPAT 176
34.1 Typical queries .................................................................................................................... 176
34.2 Brief description .................................................................................................................. 176
34.3 Contents ............................................................................................................................. 176
34.4 Dynamics ........................................................................................................................... 176
34.5 Updating ............................................................................................................................. 176
34.6 Document from RUSSIAPAT ......................................................................................... 177
34.7 Selected Fields .................................................................................................................... 178

35 USGENE 179
35.1 Brief description ................................................................................................................. 179
35.2 Contents ............................................................................................................................. 179
35.3 Dynamics ........................................................................................................................... 179
35.4 Updating ............................................................................................................................. 179
35.5 Document from USGENE ................................................................................................. 180
35.6 Selected Fields .................................................................................................................... 181

36 USPATFULL / USPAT2 182
36.1 Typical queries .................................................................................................................... 182
36.2 Brief description .................................................................................................................. 182
36.3 Contents ............................................................................................................................. 182
36.4 Dynamics ........................................................................................................................... 183
36.5 Updating ............................................................................................................................. 183
36.6 Document from USPATFULL ....................................................................................... 183
36.7 Document from USPAT2 .............................................................................................. 185
36.8 Selected Fields .................................................................................................................... 187

37 USPATOLD 188
37.1 Typical queries ................................................................................................................... 188
37.2 Brief description .................................................................................................................. 188
37.3 Contents ............................................................................................................................. 188
37.4 Dynamics ........................................................................................................................... 188
37.5 Updating ............................................................................................................................. 188
37.6 Document from USPATFULL ....................................................................................... 189
37.7 Selected Fields .................................................................................................................... 190

Types of search 191

38 Search by subject 192
38.1 Notes on subject searches in DWPI ................................................................................... 192

39 Search by text 193
39.1 Search fields ....................................................................................................................... 193
39.2 Contents of the Basic Index ............................................................................................ 195
39.3 Notes on all databases ..................................................................................................... 196
39.4 Using proximity operators with searches in text fields .................................................... 200
39.5 Notes on individual databases ................................................................. 204

40 Search by patent classification ................................................................. 208
  40.1 Classification fields .............................................................................. 208
  40.2 Principles underlying a patent classification system ............................ 209
  40.3 Searching the International Patent Classification (IPC) ....................... 210
  40.4 Searching the Cooperative Patent Classification (CPC) ....................... 219
  40.5 Searching classifications of the European Patent Office ....................... 222
  40.6 Searching the National Patent Classification (USPC) ......................... 226
  40.7 Searching the national patent classification (Japanese FI and F-Terms) .... 230
  40.8 Searching the Derwent Classification (/DC) and Manual Codes .......... 232
  40.9 Searching for US Design Patents by Locarno Classification in INPADOCDB/INPAFAMDB .... 233

41 Search by subject index ............................................................................ 234
  41.1 Search fields ....................................................................................... 234
  41.2 CAS Registry Number ........................................................................ 235
  41.3 Indexing in Chemical Abstracts ............................................................. 235
  41.4 IFIALL ................................................................................................. 236
  41.5 Sequence searching ............................................................................. 236

42 Search by numeric properties ................................................................... 239
  42.1 Numeric properties in patents ............................................................... 239
  42.2 Problem ............................................................................................... 239
  42.3 Numeric Property Search (NPS) ............................................................ 239

43 Search by name ......................................................................................... 245
  43.1 Important fields for a name search ....................................................... 245
  43.2 Index types in name fields ................................................................... 246
  43.3 Notes for all databases ......................................................................... 246
  43.4 Notes on individual countries ............................................................... 246
  43.5 Derwent databases: DWPI, DPCI, DGENE .......................................... 249
  43.6 INPADOCDB, INPAFAMDB ............................................................... 255
  43.7 PATDPA ............................................................................................. 256
  43.8 PATDPAFALL ..................................................................................... 257
  43.9 EPFULL ............................................................................................... 258
  43.10 RUSSIAPAT ...................................................................................... 258
  43.11 Chemical Abstracts, IFIALL, USPATFULL, USPAT2, JAPIO, ENCOMPPAT .......... 258
  43.12 FRANCEPAT ..................................................................................... 261
  43.13 PATDPAFALL ................................................................................... 261
  43.14 PCTGEN, RDISCLOSURE ............................................................... 261
  43.15 IMSPATENTS .................................................................................... 262
  43.16 PATDD .............................................................................................. 262

44 Search by formal data (Publication and application data) ....................... 263
  44.1 Search fields ....................................................................................... 263
  44.2 Search by country ................................................................................. 264
  44.3 Search by date ..................................................................................... 266
  44.4 Search by priority and application numbers ........................................ 266
  44.5 Search by document number ............................................................... 270
  44.6 Search by patent kind code ................................................................. 274
  44.7 Using proximity operators ................................................................. 278
  44.8 Notes on DWPI at publication level ..................................................... 279

45 Family search .......................................................................................... 281
  45.1 Typical family searches ...................................................................... 281
Guide to STN Patent Databases

45.2 International patent families ................................................................. 281
45.3 Family information in STN patent databases ......................................... 282
45.4 The patent family definitions of the database producers ..................... 285
45.5 Family searches on STN ................................................................. 289
45.6 Non-conventional patent families ......................................................... 299
45.7 Notes on other databases .................................................................. 300

46 Legal status search ................................................................................. 303
46.1 Introduction ...................................................................................... 303
46.2 Databases with legal status data ......................................................... 303
46.3 INPADOCDB/INPAFAMDB ............................................................ 305
46.4 PATDPA .......................................................................................... 314
46.5 PATDPASPC ................................................................................ 316
46.6 EPFULL ......................................................................................... 316
46.7 FRANCEPAT ............................................................................... 318
46.8 IFICLS / IFIALL ...................................................................... 319
46.9 RUSSIAPAT ............................................................................. 320
46.10 IMSPATENTS ........................................................................ 321

47 Citation search ...................................................................................... 322
47.1 Typical enquiries ............................................................................. 322
47.2 Databases with citation information .................................................. 322
47.3 Cited and citing patents ................................................................. 323
47.4 Derwent Patents Citation Index (DPCI) ............................................. 325
47.5 Notes ............................................................................................ 328

48 Crossover between databases .............................................................. 332
48.1 Crossover using L numbers or E numbers, TRANSFER ..................... 332
48.2 Simultaneous search in multiple databases (Multi-file SEARCH) ........ 332
48.3 Identifying duplicates..................................................................... 333
48.4 Crossover using the OS field .......................................................... 333

49 Display of patent images and full-text images .................................... 335
49.1 Image data in patent databases ......................................................... 335
49.2 CA/CAPLUS ............................................................................... 335
49.3 DWPI ............................................................................................ 335
49.4 RDISCLOSURE ..................................................................... 335
49.5 RUSSIAPAT ............................................................................ 336

50 Full text ............................................................................................... 337
50.1 Searches in full-text databases ......................................................... 337
50.2 Accessing the full text ..................................................................... 338
50.3 STN Viewer .................................................................................. 340

51 Patent statistics .................................................................................... 344
51.1 Introduction .................................................................................... 344
51.2 The SELECT command ................................................................. 344
51.3 The ANALYZE command ............................................................... 345
51.4 SELECT or ANALYZE? ................................................................. 351
51.5 Displaying a results table – TABULATE ....................................... 351
51.6 Using STN Express ....................................................................... 354
51.7 ANALYZE or ANALYZE PLUS? .................................................. 361
51.8 Summary: SELECT, ANALYZE, ANALYZE PLUS ..................... 362
51.9 Database dynamics and its influence on statistical analysis results .... 363
51.10 Specific statistical problems .......................................................... 366
# Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>51.11</td>
<td>Common analyses in patent statistics</td>
<td>372</td>
</tr>
<tr>
<td>51.12</td>
<td>Post-processing</td>
<td>373</td>
</tr>
<tr>
<td>51.13</td>
<td>STN 'AnaVist'</td>
<td>375</td>
</tr>
<tr>
<td>52</td>
<td>Monitoring patents</td>
<td>382</td>
</tr>
<tr>
<td>52.1</td>
<td>Introduction</td>
<td>382</td>
</tr>
<tr>
<td>52.2</td>
<td>Types of search</td>
<td>382</td>
</tr>
<tr>
<td>52.3</td>
<td>The SDI command</td>
<td>383</td>
</tr>
<tr>
<td>52.4</td>
<td>Saved queries</td>
<td>387</td>
</tr>
<tr>
<td>52.5</td>
<td>Support for command files by STN software</td>
<td>388</td>
</tr>
<tr>
<td>52.6</td>
<td>Patent types and country coverage</td>
<td>389</td>
</tr>
<tr>
<td>52.7</td>
<td>SDI frequency</td>
<td>390</td>
</tr>
<tr>
<td>52.8</td>
<td>Information on timeliness: HCAPLUS and IFIALL</td>
<td>391</td>
</tr>
<tr>
<td>52.9</td>
<td>Search fields for awareness searches</td>
<td>391</td>
</tr>
<tr>
<td>53</td>
<td>Subject search example</td>
<td>405</td>
</tr>
<tr>
<td>53.1</td>
<td>Example 1</td>
<td>406</td>
</tr>
<tr>
<td>53.2</td>
<td>Example 2</td>
<td>406</td>
</tr>
<tr>
<td>54</td>
<td>Example for subject classification on-line (IPC)</td>
<td>422</td>
</tr>
<tr>
<td>54.1</td>
<td>Hierarchical search</td>
<td>422</td>
</tr>
<tr>
<td>54.2</td>
<td>Range search</td>
<td>423</td>
</tr>
<tr>
<td>54.3</td>
<td>Identifying relevant IPC classes (Chemical Abstracts)</td>
<td>424</td>
</tr>
<tr>
<td>54.4</td>
<td>Identifying relevant IPC classes (INPADOCDB)</td>
<td>424</td>
</tr>
<tr>
<td>55</td>
<td>Example for subject classification on-line (USPC)</td>
<td>426</td>
</tr>
<tr>
<td>55.1</td>
<td>Search question</td>
<td>426</td>
</tr>
<tr>
<td>55.2</td>
<td>Search in IFIREF (1st part of search)</td>
<td>426</td>
</tr>
<tr>
<td>55.3</td>
<td>Search in USPATFULL (Alternative 1st part of search)</td>
<td>427</td>
</tr>
<tr>
<td>55.4</td>
<td>Continued search in USPATFULL (2nd part of search)</td>
<td>428</td>
</tr>
<tr>
<td>55.5</td>
<td>Search in IFIPAT</td>
<td>430</td>
</tr>
<tr>
<td>56</td>
<td>Search by subject index example</td>
<td>431</td>
</tr>
<tr>
<td>56.1</td>
<td>Example 1</td>
<td>431</td>
</tr>
<tr>
<td>56.2</td>
<td>Example 2</td>
<td>432</td>
</tr>
<tr>
<td>56.3</td>
<td>Example 3</td>
<td>434</td>
</tr>
<tr>
<td>57</td>
<td>Numeric Property Search example</td>
<td>439</td>
</tr>
<tr>
<td>57.1</td>
<td>Example 1</td>
<td>439</td>
</tr>
<tr>
<td>57.2</td>
<td>Example 2</td>
<td>439</td>
</tr>
<tr>
<td>57.3</td>
<td>Example 3</td>
<td>440</td>
</tr>
<tr>
<td>57.4</td>
<td>Example 4</td>
<td>440</td>
</tr>
<tr>
<td>58</td>
<td>Search by name (Inventor) example</td>
<td>441</td>
</tr>
<tr>
<td>58.1</td>
<td>Example 1</td>
<td>441</td>
</tr>
<tr>
<td>58.2</td>
<td>Example 2</td>
<td>444</td>
</tr>
<tr>
<td>59</td>
<td>Search by name (Patent assignee) example</td>
<td>446</td>
</tr>
<tr>
<td>59.1</td>
<td>Example 1</td>
<td>446</td>
</tr>
<tr>
<td>59.2</td>
<td>Example 2</td>
<td>448</td>
</tr>
<tr>
<td>59.3</td>
<td>Example 3</td>
<td>450</td>
</tr>
<tr>
<td>59.4</td>
<td>Example 4</td>
<td>453</td>
</tr>
<tr>
<td>59.5</td>
<td>Example 5</td>
<td>454</td>
</tr>
</tbody>
</table>
60 Family search example 458
60.1 Search question .......................................................... 458
60.2 Search in INPAFAMDB .................................................. 458
60.3 Search in INPADOCDB .................................................. 459
60.4 Search in DWPI .............................................................. 461
60.5 Search in IFIPAT ............................................................ 462
60.6 Search in USPATFULL .................................................... 463
60.7 Extended family search in DWPI ...................................... 463

61 Legal status search example 465
61.1 Example 1 ................................................................. 465
61.2 Example 2 ................................................................. 471
61.3 Example 3 ................................................................. 472
61.4 Example 4 ................................................................. 475
61.5 Example 5 ................................................................. 475

62 Citation search example 489
62.1 Example 1 ................................................................. 489
62.2 Example 2 ................................................................. 494
62.3 Example 3 ................................................................. 500
62.4 Example 4 ................................................................. 501

63 Monitoring search example 503
63.1 INPADOCDB ............................................................. 503
63.2 Chemical Abstracts ...................................................... 516

64 Multi-file search example 519
64.1 Subject search – Example 1 ............................................ 519
64.2 Subject search – Example 2 ............................................ 522
64.3 Search by name (Using the EXPAND command) ............. 527
64.4 Search by name (Using proximity) ................................. 529
64.5 Patent records in different databases .............................. 532
64.6 Cross-file search with overlapping numbers .................. 536

65 ANALYZE tool examples 539
65.1 Example 1 – One Field Analysis .................................... 539
65.2 Example 2 – Two Field Analysis .................................... 544
65.3 Example 3 – Two Field Analysis .................................... 552

Surveys 555

66 Country codes and country coverage of CA, INPADOCDB, INPAFAMDB, DWPI 556

67 Abbreviations 559
67.1 Chemical Abstracts ...................................................... 559
67.2 Derwent World Patents Index ........................................ 560

68 INPADOCDB/INPAFAMDB – Numbers with appended codes 564
68.1 Patent numbers ......................................................... 564
68.2 Application numbers .................................................. 565
Guide to STN Patent Databases

69  Asian Publications ................................................................. 566
   69.1  CAPLUS ........................................................................ 566
   69.2  INPAFAMDB .............................................................. 567
   69.3  DWPI .............................................................................. 568
   69.4  Summary: Chinese Patent Documents ........................................ 569
   69.5  Summary: Indian Patent Documents ........................................... 570
   69.6  Summary: Japanese Patent Documents ........................................ 571
   69.7  Summary: Korean Patent Documents ........................................... 572

70  Italy: Province codes in application numbers ..................................... 573

71  Number formats (Publication numbers, from 1968) ........................... 575
Introduction
1 Steps to conduct a patent search

Using online databases is actually very like doing a manual search. However, the manual searcher is probably unaware of many of the steps involved.

1.1 Before the search

- Understanding the enquiry involves:
  - Formulating the subject of the search – as accurately but also as comprehensively as possible
  - Describing the subject of the search – to exclude what is already known or not required
  - Allocating it according to the type of search
  - Limiting it according to certain formal criteria, e.g. number of patents expected; period; countries; languages

- Formulate the criteria for the search:
  - Select relevant search words
  - Decide on classification (e.g. IPC, USCL)
  - Names of inventors/applicants if known
  - Numbers of patents already known

This involves determining search criteria that will accurately reflect the heart of the matter. If one is tackling a search for ‘brakes for inline skates’, for instance, a number of questions arise:

- Are there other names for inline skates? – e.g. rollerblades or roller-blades or roller skates.
- Is it vital that the brakes are only for roller-blades or could the brakes be used on roller skates? It may be wise to drop the ‘inline’ element.
- How many documents do you expect? If the subject of the search yields too many results one should (initially) limit the search to a more specific subject (e.g. brakes operated by hand).
- Which one (or more) of the relevant classes should be searched?
- Are there certain firms that ought to come up on the search? – It may be possible to check the quality of the search against this.
- Are some patents already known? – They may give some assistance in narrowing down the search strategy.

- Select one or more patent databases
  - By subject – e.g. Chemistry – Chemical Abstracts
  - By country – e.g. International – DWPI, e.g. U.S.A. – USPATFULL
  - By type of search – e.g. patent family – INPADOCDB

- Decide how various search criteria should be linked to each other – Search strategy
  (The search strategy also depends on the type of search and the databases chosen, cf. chapter Types of search.)

- Formulate the search queries – Search logic
  (This depends on the type of search and the databases chosen, too. It may also be necessary to perform some online test searches.)
1.2 **The actual search**

- Offline preparation
  - Prepare a sheet with the search criteria and the search logic as well as room for taking notes during the online session (e.g. query numbers, hits)
  - Prepare a command file with the search criteria and search logic for the software used (e.g. STN Express) – particularly important with extensive searches
- Enter the search criteria and their linking or execute the command file
- Check the results of the search:
  - Evaluate the number of hits
  - Check the titles
- Refine the search/new search
  - This will depend on the result already obtained
  - It may not be necessary
- Check for duplicates, sort the documents
- Display the documents or those selected, possibly request full text display or order full text
- Save the transcript.

1.3 **After the search**

- Evaluate and collate the results
- Create a search report.
2 Typical searches and types of search

- **What patents exist for brakes suitable for roller blades?**
  You want to know about patents granted/applied for in a specialist field, thus what is already known, possibly already patented, and whether there has already been a solution to the problem you pose. This is a Subject Search.

- **What patents are owned by Smith, Inc. in Columbus, OH?**
  This is a Name Search – for a particular applicant.

- **What patents are owned by Zebadiah Smith?**
  This is also a Name Search – for an inventor.

- **There is reputed to be a patent owned by Smith, Inc. for a new brake for roller skates. Is this true? What does it say?**
  This is a combination of Name Search and Subject Search.

- **Do we have to have regard to the US patent no. 5,000,075 in the UK?**
  You do have to, a) if you want to sell your product in the USA or b) if this patent has been applied for in the UK, either directly at the Intellectual Property Office, IPO, or at the European Patent Office, EPO. – You have to decide yourself about (a), but (b) involves a Patent Family Search.

- **Is there a patent written in English that relates to the number JP57080923?**
  There may be such a patent on account of an application in another country. To find out, a Patent Family Search is necessary.

- **Has a patent been granted to the application no. GB 94-4567, or is the application still valid?**
  A Legal Status Search can answer this question.

- **What other patents are cited in the US patent no. 5,000,075? Where has this patent itself been cited?**
  These are questions that can be answered with a Citation Search.

- **What is the complete text of US patent no. 5,000,075?**
  There are some databases that provide the Full Text for patents.

- **How can I search for the patents of a particular country?**

- **How can I search for dates?**

- **How should I enter a patent number?**
<table>
<thead>
<tr>
<th>Type of Search</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject search</td>
<td>You need to find out what patents have been published on a subject or in a specialist field, i.e. you want to know what is already known and what, if anything, is already protected by a patent – you want to establish the ‘state of the art’.</td>
</tr>
<tr>
<td>Name search</td>
<td>You need to find out all the patents published by a particular company (applicant) or person (inventor).</td>
</tr>
<tr>
<td>Patent family search</td>
<td>You are aware of a published patent (its patent or application number) and want to know in which other countries its inventor has filed an application or been granted a patent.</td>
</tr>
<tr>
<td>Legal status search</td>
<td>You are aware of a published patent (its patent or application number) and want to know if a patent was granted and if it is still valid.</td>
</tr>
<tr>
<td>Citation search</td>
<td>You have details of a published patent and want to know what other publications are cited in it and in which other publications it is itself cited.</td>
</tr>
<tr>
<td>Full text order</td>
<td>You have got the details of a published patent and want the entire text and drawings.</td>
</tr>
<tr>
<td>Search by country</td>
<td>You want to limit the outcome of a search (e.g. a subject search) to particular countries.</td>
</tr>
<tr>
<td>Search by date</td>
<td>You want to limit the outcome of a search (e.g. a subject search) to a particular period of time.</td>
</tr>
<tr>
<td>Search by number</td>
<td>You have got a number, which may be either a patent number or an application number, for a published patent, and want to know whether this application really exists and what is protected under the patent.</td>
</tr>
</tbody>
</table>

3 Overview: Search options available in STN databases

On the following pages, an outline is given of the most important search options available in STN patent databases. These symbols are used:

+ — search option is available,
* — limited search option (e.g. only display).

For an actual search problem, the notes on the appropriate database and the search type in general should be read first, and then the other notes or examples.
### Bibliographic patent files (international)

<table>
<thead>
<tr>
<th>Type of search</th>
<th>Database</th>
<th>CAPLUS</th>
<th>DWPI</th>
<th>INPADOCDB</th>
<th>INPAFAMDB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Subject search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keywords</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>IPC</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>CPC</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Other classification(s)</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Indexing</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerical properties</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. <strong>Name search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Patent assignee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Other names</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. <strong>Search by country</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application/publication</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designated states</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>4. <strong>Date information</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Database entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. <strong>Search by number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Document number (Patent number)</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>6. <strong>Family Search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>7. <strong>Legal status data</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>8. <strong>Citations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>9. <strong>Related documents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>10. <strong>Sources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>(Patent gazette etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. <strong>Other sources, Cross references</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>12. <strong>Patent images</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>13. <strong>Full text</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.2 Bibliographic patent files (national)

<table>
<thead>
<tr>
<th>Type of search</th>
<th>Database</th>
<th>FRANCE PAT*</th>
<th>IFIALL</th>
<th>JAPIO*</th>
<th>KOREA PAT</th>
<th>PATDD*</th>
<th>PATDPA*</th>
<th>RUSSIA PAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Subject search</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keywords</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>IPC</td>
<td></td>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>CPC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other classification(s)</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indexing</td>
<td></td>
<td>+</td>
<td></td>
<td>+</td>
<td></td>
<td>+</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Numerical properties</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Name search</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td></td>
<td>+</td>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patent assignee</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other names</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Search by country</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Application/publication countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designated states</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Date information</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Database entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Search by number</td>
<td></td>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>*</td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Document number (Patent number)</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>6. Family Search</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>7. Legal status data</td>
<td></td>
<td>+</td>
<td>*</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>8. Citations</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Related documents</td>
<td></td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td>*</td>
<td>+</td>
</tr>
<tr>
<td>10. Sources (Patent gazette etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>11. Other sources, Cross references</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>12. Patent images</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>13. Full text</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

* Closed files: There have been no more updates since 2004 (PATDD), 2009 (FRANCEPAT), 2011 (PATDPA), and 2013 (JAPIO) respectively.
## 3.3 Fulltext files

<table>
<thead>
<tr>
<th>Type of search</th>
<th>Database</th>
<th>AUPATFULL</th>
<th>CANPATFULL</th>
<th>CNFULL</th>
<th>DEFULL</th>
<th>EPFULL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Subject search</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Keywords</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPC</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>CPC</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other classification(s)</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indexing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerical properties</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Name search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patent assignee</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other names</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. Search by country</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Application/publication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>countries</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Designated states</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. Date information</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Database entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5. Search by number</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Document number (Patent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>number)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6. Family Search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7. Legal status data</strong></td>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>+</td>
</tr>
<tr>
<td><strong>8. Citations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9. Related documents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>10. Sources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Patent gazette etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11. Other sources,</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cross references</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>12. Patent images</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>*</td>
<td>*</td>
<td>+</td>
</tr>
<tr>
<td><strong>13. Full text</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Type of search</td>
<td>Database</td>
<td>FRFULL</td>
<td>GBFULL</td>
<td>IFIALL</td>
<td>INFULL</td>
<td>JPFULL</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>1. <strong>Subject search</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Keywords</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>IPC</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>CPC</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Other classification(s)</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Indexing</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerical properties</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>2. <strong>Name search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Inventor</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Patent assignee</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Other names</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. <strong>Search by country</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Application/publication countries</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Designated states</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. <strong>Date information</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Database entry</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>5. <strong>Search by number</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Document number (Patent number)</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>6. <strong>Family Search</strong></td>
<td></td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Legal status data</td>
<td></td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. <strong>Citations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>9. Related documents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Sources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Patent gazette etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Other sources, Cross references</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>12. Patent images</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Full text</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>Type of search</th>
<th>Database</th>
<th>PATDPFULL</th>
<th>PCTFULL</th>
<th>RDISCLOSURE</th>
<th>USPATFULL</th>
<th>USPATOLD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Subject search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keywords</td>
<td></td>
<td>+</td>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>IPC</td>
<td></td>
<td>+</td>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>CPC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other classification(s)</td>
<td></td>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Indexing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Numerical properties</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td><strong>2. Name search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventor Name</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patent assignee Name</td>
<td></td>
<td>+</td>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Other names</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>3. Search by country</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Application/publication countries</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Designated states</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. Date information</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Application/Publication Database entry</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>5. Search by number</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Document number (Patent number)</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>6. Family Search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7. Legal status data</strong></td>
<td></td>
<td>*</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td><strong>8. Citations</strong></td>
<td></td>
<td>+</td>
<td>*</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9. Related documents</strong></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>10. Sources (Patent gazette etc.)</strong></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11. Other sources, Cross references</strong></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>12. Patent images</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td><strong>13. Full text</strong></td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
### 3.4 Patent databases with specific subject coverage (international)

<table>
<thead>
<tr>
<th>Type of search</th>
<th>DGENE</th>
<th>DPCI</th>
<th>ENCOMPPAT</th>
<th>IMSPATENTS</th>
<th>PCTGEN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Subject search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keywords</td>
<td>+</td>
<td>*</td>
<td>+</td>
<td>+</td>
<td>*</td>
</tr>
<tr>
<td>IPC</td>
<td></td>
<td>*</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other classification(s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indexing</td>
<td>+</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Numerical properties</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Name search</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patent assignee</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other names</td>
<td></td>
<td>+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. Search by country</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application/publication countries</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Designated states</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td><strong>4. Date information</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Database entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5. Search by number</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application/Publication</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Document number (Patent number)</td>
<td></td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><strong>6. Family Search</strong></td>
<td>*</td>
<td>+</td>
<td>*</td>
<td>*</td>
<td>+</td>
</tr>
<tr>
<td><strong>7. Legal status data</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8. Citations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9. Related documents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>10. Sources</strong> (Patent gazette etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11. Other sources, Cross references</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>12. Patent images</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td><strong>13. Full text</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 3.5 Patent databases with specific subject coverage (national)

<table>
<thead>
<tr>
<th>Type of search</th>
<th>Database</th>
<th>USGENE</th>
<th>LITALERT</th>
<th>PATDPASPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Subject search</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keywords</td>
<td></td>
<td>+</td>
<td>+</td>
<td>*</td>
</tr>
<tr>
<td>IPC</td>
<td></td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>CPC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other classification(s)</td>
<td></td>
<td></td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Indexing</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Numerical properties</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Name search</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patent assignee</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other names</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>3. Search by country</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application/publication countries</td>
<td></td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Designated states</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Date information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application/Publication</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Database entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Search by number</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application/Publication</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Document number (Patent number)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>6. Family Search</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Legal status data</td>
<td></td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>8. Citations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Related documents</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>10. Sources (Patent gazette etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Other sources, Cross references</td>
<td></td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>12. Patent images</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Full text</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 3.6 Files with patent classifications and references

- **All databases with IPC.** The International Patent Classification (IPC) can be searched using the thesaurus in the /IPC field. Range searching is also possible.

<table>
<thead>
<tr>
<th>Databases Classification</th>
<th>AUPATFULL, CANPATFULL, CNFULL, DEFULL, FRFULL, GBFULL, INFULL, JPFULL, PCTFULL</th>
<th>CAPPLUS</th>
<th>DWPI</th>
<th>INPADOCDB INPAFAMDB</th>
<th>USPATFULL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPC</td>
<td>CPC mit Thesaurus</td>
<td>CPC mit Thesaurus</td>
<td>CPC mit Thesaurus</td>
<td>CPC mit Thesaurus</td>
<td>CPC mit Thesaurus</td>
</tr>
<tr>
<td>ECLA</td>
<td>ECLA /EPC, ICO /ICO, IDT /IDT with thesaurus historical codes</td>
<td>From 1993: /ECLA with thesaurus historical codes</td>
<td>ECLA /EPC, ICO /ICO with thesaurus historical codes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTERMS</td>
<td>From 2004 /FTERM with thesaurus</td>
<td>From 1966: FI Class /FCL, FTERMS /FTERM with thesaurus</td>
<td>From 1966: FI Class /FCL, FTERMS /FTERM with thesaurus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USCL</td>
<td>/NCL with thesaurus</td>
<td>/NCL with thesaurus</td>
<td>/NCL with thesaurus</td>
<td>/NCL with thesaurus</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>DWPI Class /DC</td>
<td></td>
<td>Locarno Cl. /LCL for US Design Patents from 2005; Other nat. Cl. /OCL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **IFIREF.** This database gives access to the US Classification and IFIClaims Uniterms.
Patent databases on STN International
4 The dynamics of the patent procedure

There is a big difference between patent databases and other biographical databases, and it is this: the patent databases have to reflect the actual progress of a patent application, examination and granting. Thus the document entered into the database shows the stage the application has reached at a particular time, for instance after publication of the application. The data that are published in respect of the application after this date are added to the databases later. They use a variety of principles in the way they do this updating.

4.1 Static principle

A publication (e.g. an unexamined application) is received as a record (= documentation unit) in the database. This record is never altered. A further publication (e.g. the granted patent) or changes to the legal status are not recorded in the database.

This principle is employed in the PCTFULL database (and in most of the scientific literature databases).

4.2 Dynamic Principle

A new record is set up in the database at the point of the first publication, and any details of the publication, and possibly the legal status, are entered at this stage.

When a new publication takes place or the legal status changes, the content of the original record is altered, with the result that one record is used for one patent application procedure, however many publication events have taken place.

This 'dynamic' principle is used in the DWPI (invention level) and INPAFAMDB databases, for instance.

4.3 Mixed principles

Some of the databases do not apply a ‘pure’ static or dynamic principle, but some sort of variation. In most cases only a small number of fields is updated. The bibliographical details and text of a new patent publication for a particular application (patent procedure) are recorded in a new document (record) in the database. Here are the most important principles used:

4.3.1 Static principle using separate documents

When the first publication is made of a particular invention the first document is entered into the database holding the bibliographical details and text substance of the publication. If later a patent is granted the new publication and
Patent databases on STN International

its details and text substance will be entered into a second document in the database. A number of fields in both documents will be updated when later changes occur, e.g. the document type or national classification.

This principle is applied in the IFIPAT database.

**Figure:** Static principle using separate documents

**Figure:** Static principle using segmentation

### 4.3.2 Static principle using segmentation

As with the static principle a document once entered in the database remains in its original form, even if later publications appear. To add any further publications relating to the same invention, a special construction is used. One ‘Documentation Unit’ is divided into several ‘Segments’ or ‘Publication levels’. Each segment or level takes one document.

If an application is first published a new documentation unit is created and the data of the document are entered. If after that a patent is granted the existing documentation unit is extended by one segment or level and the data of this publication are entered. Once they have been entered, the documents are not altered in any way.

Later publications or legal status data (for example in INPADOCDB) may also be entered into the documentation unit. Documents containing legal status data are dynamic, i.e. new information is added to the existing data.

This principle is used in a number of databases, e.g. EPUF, INPADOCDB, DWPI.

### 4.3.3 Dynamic principle using two databases

This principle is used in the American full-text databases USPATFULL and USPAT2. As with the dynamic principle, the records in the USPATFULL database are altered (entered, overwritten) when new information becomes available. In order to place the new full text of a granted patent in addition to that of the application this new document is entered in the USPAT2 database. If applicable, the bibliographical details may be altered. If there is another new publication later, the whole document in USPAT2 will be overwritten.
Figure: Dynamic principle using two databases
5 AUPATFULL

5.1 Typical queries

- Searches for the state of the art in AU publications (text and classification), e.g.:
  - What AU applications are there on sweet potato fermentation?
- Name searches (inventor, applicant), e.g.:
  - What AU applications of GENENTECH have been published during the past year?
  - What AU applications are there of Mr Richard Dickerson?
- Searches using formal data (e.g. numbers), e.g.:
  - What is contained in the AU application numbered AU2006234758?
  - We are looking for the full-text of an application of the company SDU IDENTIFICATIONS of 13 April 2006.
- Full-text display of AU patents
  - What are the claims made in the AU publication numbered 2009201220?
- Numeric Property Search in the context of the fulltext
  - Search for a length in the nanometer range
- Display of legal status data
- Monitoring PCT applications
- Using the full-text to find material for an opposition
- Multi-file searches in combination with other national or regional patent databases

5.2 Brief description

Producer: LexisNexis Univentio B.V., Netherlands
Period covered: Since 1964
Size: More than 1.3 million records on patents, more than 644,000 full texts, more than 440,000 patent images (August 2014)
Updated: Weekly
Language: English

5.3 Contents

- Full-text of patent applications and patent specifications published in Australia
- Bibliographical details
- International Patent Classification, IPC1–8, IPC thesaurus, range searchable
- Cooperative Patent Classification (CPC), thesaurus, range searchable
- European Patent Classification (ECLA), ECLA thesaurus, range searchable; other European classifications: ICO, IDT, are kept as historical data
- Legal status information from INPADOCDB can be displayed (LS, LS2, FAM and CFAM fields) but is not searchable in AUPATFULL
- Citation information from INPADOCDB can be displayed (RE field), but is not searchable
Guide to STN Patent Databases

- Drawings from the first page of the publication
- Numeric values of over 30 physical and chemical properties in almost 400 units are searchable in all full text fields
- Full text has been created by Optical Character Recognition (OCR) software. This means that there may be errors and incomplete text. Some of the documents do not have text because the scanning failed.

5.4 Dynamics

The AUPATFULL database follows a mixed principle using segmentation. All publications of the same patent application form one documentation unit. Each document is entered into a separate record and will not be updated. The legal status from INPADOCDB is updated.

5.5 Updating

Publications appear in AUPATFULL at the earliest 4 days after the date of publication.

5.6 Document from AUPATFULL

Display format: MAXG LS

AN 2011000537 AUPATFULL ED 20110629 UP 20110629 EDTX 20110629  
DED 20110330 DUPD 20110520  
TI A portable cot  
IN SEAN MORAN  
PA FUNTASTIC LIMITED;  
LAF English  
DT Patent; [Full text]  
PIT AU4 GRANTED OPI INNOVATION PATENT [FROM 20010524 ONWARDS]  
PI AU 2011100127 A4 20110324  
AI AU 2011-100127 20110131  
PRAI AU 2011-100127 20110131  
IPCI A47D0007-00 [I,A]  
EPC A47D0013-06B2; A47D0007-00B  

DETD  
A portable cot The following statement is a full description of this invention, including the best method of performing it known to us: COMS ID No: ARCS-307977 Received by IP Australia: Time (H:m) 17:39 Date (Y-M-d) 2011-01-31 A PORTABLE COT Field of the invention The present invention relates to a portable cot. In particular, the invention ...

CLM  
1. A foldable cot including: an upper peripheral frame supported on each side by a supporting leg structure, each of which comprises two support legs pivotable relative to one another between an angled configuration whereby the support legs extend at an included angle, and a collapsed configuration whereby the support legs extend at a lesser included angle; bracing mechanisms each of which extend between one of the support legs and an adjacent part of the upper peripheral frame, each bracing mechanism comprising two links which are joined to one another ...

5. The foldable cot substantially as hereinbefore described with reference accompanying figures, COMS ID No: ARCS-307977 Received by IP Australia: Time (H:m) 17:39 Date (Y-M-d) 2011-01-31...

AN 2011000537 AUPATFULL ED 20110629 UP 20110629 EDTX 20110629  
DED 20110516 DUPD 20110526  
TI A portable cot  
IN SEAN MORAN  
PA FUNTASTIC LIMITED;  
LAF English  
DT Patent; [Full text]  
PIT AU4 CERTIFIED INNOVATION PATENT [FROM 20010524 ONWARDS]  
PI AU 2011100127 B4 20110512
A portable cot

The following statement is a full description of this invention, including the best method of performing it known to us:

COMS ID No: ARCS-307977

Received by IP Australia: Time (H:m) 17:39 Date (Y-M-d) 2011-01-31

A PORTABLE COT

Field of the invention

The present invention relates to a portable cot. In particular, the invention...

CLM

1. A foldable cot including: an upper peripheral frame supported on each side by a supporting leg structure, each of which comprises two support legs pivotable relative to one another between an angled configuration whereby the support legs extend at an included angle, and a collapsed configuration whereby the support legs extend at a lesser included...

5. The foldable cot substantially as herebefore described with reference accompanying figures, COMS ID No: ARCS-307977

Received by IP...
5.7 **Selected Fields**

<table>
<thead>
<tr>
<th>AUPATFULL</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, EDTX, UP, DED, DUPD</td>
<td>AN ED, EDTX, UP, DED</td>
<td>AN ED, EDTX, UP, DED</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, Ti AB CLM, MCLM</td>
<td>Ti AB (ABS); CLM, DETD, MCLM</td>
<td>Ti AB CLM, MCLM, DETD</td>
</tr>
<tr>
<td>Numeric properties</td>
<td>PHP*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
</tr>
<tr>
<td>Patent assignee / patent holder</td>
<td>PA (CS)</td>
<td>PA (CS)</td>
<td>PA (CS)</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRDF, PRK, PRY, PRYF PRN, PRNO, APPS</td>
<td>PRN (PRAI) PRYF, PRNO (PRAO)</td>
<td>PRC, PRD, PRDF, PRK, PRY, PRYF PRN (PRAI), PRNO, APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AY AP, APPS</td>
<td>AI (AP)</td>
<td>AI (AP), AC, AD, AY AP, APPS, PCS</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PY, PK, PIT PN, PNK, PNO</td>
<td>PI (PN, PATS), PIT PNO</td>
<td>PI (PN, PATS), PC, PD, PY, PK, PIT PN, PNK, PNO</td>
</tr>
<tr>
<td>Related documents</td>
<td>RLC, RLD, RLY, RLN</td>
<td>RL (RLN)</td>
<td>RLC, RLN, RLD, RLY</td>
</tr>
<tr>
<td>Legal status</td>
<td></td>
<td></td>
<td>LS, LS2, FAM, CFAM</td>
</tr>
<tr>
<td>Other</td>
<td>CLMN, DETN, DT, GIS, GIT, LA, LAF</td>
<td>CLMN, DETN, DT, GIS, GIT, LA, LAF, FA</td>
<td>CLMN, DETN, DT, GIS, GIT, LA, LAF, FA</td>
</tr>
</tbody>
</table>

* Numeric properties: \(\text{E A/PHP}\) lists properties available for numeric search (cf. database description). The search is performed in all fields containing English text. There are no specific display fields, but the hit numeric values will be highlighted. For more information enter `HELP NPS`.

### 5.7.1 Super-Search-Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
</tbody>
</table>
6 CANPATFULL

6.1 Typical queries

- Searches for the state of the art in CA publications (text and classification), e.g.:
  - What CA applications are there on sweet potato fermentation?
- Name searches (inventor, applicant), e.g.:
  - What CA applications of HABITAFLEX CONCEPT INC. were published during the past year?
  - What CA applications are there of Mr Nolan McDonald?
- Searches using formal data (e.g. numbers), e.g.:
  - What is the text of the CA application numbered CA 2735018?
  - We are looking for the full-text of an application of the company MOLD HOTRUNNER SOLUTIONS that was published on October 6, 2011.
- Full-text display of CA patents:
  - What are the claims of the CA patent numbered CA2009209?
- Numeric Property Search in the context of the fulltext
  - Search for a length in the nanometer range
- Display of legal status data
- Monitoring CA applications
- Using the full-text to find material for an opposition
- Multi-file searches in combination with other national or regional patent databases

6.2 Brief description

Producer: LexisNexis Univentio B.V., Netherlands
Period covered: Since 1920
Size: More than 2.2 million records on patents, more than 1.95 million full texts, more than 1.3 million patent images (August 2014)
Updated: Weekly
Languages: English, French

6.3 Contents

- Full text of applications and patent specifications published in Canada
- About 40,000 documents are in French, the abstracts were human translated to English, the claims and descriptions were machine translated to English
- 99% of the documents have a French title in addition to the English title
- Bibliographical details
- International Patent Classification, IPC1–8, IPC thesaurus, range searchable
- Cooperative Patent Classification (CPC), thesaurus, range searchable
Guide to STN Patent Databases

- European Patent Classification (ECLA), ECLA thesaurus, range searchable; other European classifications: ICO, IDT, are kept as historical data
- Legal status information from INPADOCDB can be displayed (LS, LS2, FAM and CFAM fields), but is not searchable
- Citation information from INPADOCDB can be displayed (RE field), but is not searchable
- Drawings from the first page of the publication.
- Numeric values of over 30 physical and chemical properties in almost 400 units are searchable in all full text fields
- All texts are created by Optical Character Recognition (OCR) software. This means that there may be errors and incomplete text. Some of the documents do not have text because the scanning failed.

6.4 Dynamics

The CANPATFULL database follows a mixed principle using segmentation. All publications of the same patent application form one documentation unit. Each document is entered into a separate record and will not be updated. The legal status from INPADOCDB is updated.

6.5 Updating

Publications appear in CANPATFULL at the earliest 1 to 2 weeks after the date of publication.

6.6 Document from CANPATFULL

Display format: MAXG LS

AN 2010003079 CANPATFULL ED 20110818 UP 20110818 EDTX 20110803
DED 20101229 DUPD 20110803
TIEN FOLDABLE ROOF FOR FOLDABLE HABITATION
TIFR TOITURE REPLIABLE POUR HABITATION PLIABLE
IN LAPRISE, DANIEL, 117, 11e rue, MONTMAGNY, G5V 3E4, CA; FORTIN, MATHIEU, 8, rue Cormier, CARAQUET, E1W 1A5, CA
PA HABITAFLEX CONCEPT INC., 240 avenue Des Ateliers, MONTMAGNY, G5V 4G4, CA, [NAT: CA, RES: CA]
AG NORTON ROSE OR S.E.N.C.R.L., S.R.L./LLP, CA
LAF English
LA English
DT Patent; (Full text)
PTT CAA1 PATENT (PUBLISHED FROM 1973 ONWARDS) [FROM NO. 1 TO 1275150] or APPLICATION LAID OPEN [FROM NO. 2000001 ONWARDS]
P1 CA 2719746 A1 20101119
AI CA 2010-2719746 20100517
RLN WO 2010-CA756 20100517
PRAI US 2009-179547P 20090519
IPCI E04B0001-343 [I,A]; E04B0007-16 [I,A]
EPC E04B0001-344C

The foldable habitation has a foldable roof with a central section which can be folded into a generally flat configuration for transportation and storage, and which can be automatically deployed into a chevron shape upon deploying lateral sections of the roof. A novel method of handling a foldable habitation is also disclosed.

DE TDEN CA 02719746 2010-11-05 - FOLDABLE ROOF FOR FOLDABLE HABITATION
CROSS-REFERENCE TO RELATED APPLICATIONS [000t] This application claims priority of United States Provisional Application no. 61/179,547, entitled "Foldable Roof for Foldable Habitation" and filed 19 May 2009 by applicants, and is also related to United States Patent Application Pub.
1. A roof for a foldable habitation also having a structural core, a floor and walls, and being foldable between a transport configuration and a deployed configuration, the roof having a center section including two interconnected center section panels, each having a proximal edge and both being positioned above the structural core of the foldable habitation, and two lateral sections, the foldable roof being characterized in that the two lateral sections are each foldably connected to a corresponding opposite side of the structural core of the foldable habitation, about two first fold axes, and each foldably connected to one another at their proximal edge, the first fold axes being interspaced from the corresponding second fold axis in a manner that the center section panels are automatically deployed into a chevron shape upon deploying the lateral sections of the roof.

25. The method of claim 24 wherein at least the second foldable habitation is manipulated by the two support frames during the step of moving.
20. The foldable roof system of claim 18 or 19 wherein the given angle is normal to the planar covering.
## 6.7 Selected Fields

<table>
<thead>
<tr>
<th>CANPATFULL</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, EDTX, UP, DED, DUPD</td>
<td>AN ED, EDTX, UP, DED</td>
<td>AN ED, EDTX, UP, DED</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, Ti, AB, CLM, M.CLM</td>
<td>TI AB (ABS); CLM, DETD, M.CLM</td>
<td>TI AB CLM, M.CLM, DETD</td>
</tr>
<tr>
<td>Numeric properties</td>
<td>PHP*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER, IPCI, IPCR, IPC.REF</td>
<td>IPC8: IPC, IPC.TAB, IPCI, IPC</td>
<td>IPC8: IPC, IPCI, IPCR, IPC.REF, IPC.A, IPC.AI, IPC.F</td>
</tr>
<tr>
<td>Other: IPC, IPC.KW</td>
<td>IPC1: IC, ICM, ICS</td>
<td>IPC1: IC, ICM, ICS</td>
<td>IPC1: IC, ICM, ICS</td>
</tr>
<tr>
<td>CPC: CPC, CPC.ACD, CPC.KW, CPC.VER</td>
<td>CPC: CPC, CPC.TAB</td>
<td>CPC: CPC</td>
<td></td>
</tr>
<tr>
<td>Other: EPC, EPC.KW</td>
<td></td>
<td>Other: EPC, ICO, IDT</td>
<td></td>
</tr>
<tr>
<td>Other: EPC, ICO, IDT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
</tr>
<tr>
<td>Patent assignee / patent holder</td>
<td>PA (CS)</td>
<td>PA (CS)</td>
<td>PA (CS)</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRDF, PRK, PLY, PLYF, PRN, PRNO, APPS</td>
<td>PRN (PRAI)</td>
<td>PRC, PRD, PRDF, PRK, PLY, PLYF, PRN (PRAI), PRNO, APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AY</td>
<td>AI (AP)</td>
<td>AI (AP), AC, AD, AY, AP, APPS, PCS</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PY, PK, PIT, PN, PKN, PNO</td>
<td>PI (PN, PATS), PIP, PIP</td>
<td>PI (PN, PATS), PC, PD, PY, PK, PIT, PN, PKN, PNO</td>
</tr>
<tr>
<td>Related documents</td>
<td>RLC, RLD, RLY, RLN</td>
<td>RLI (RLN)</td>
<td>RLC, RLN, RLD, RLY</td>
</tr>
<tr>
<td>Legal status</td>
<td></td>
<td>LS, LS2, FAM, CFAM</td>
<td>LS, LS2</td>
</tr>
<tr>
<td>Other</td>
<td>CLMN, DETN, DT, GIS, GIT, LA, LAFA</td>
<td>CLMN, DETN, DT, GIT, GIT, LA, LAFA</td>
<td>CLMN, DETN, DT, GIS, GIT, LA, LAFA</td>
</tr>
</tbody>
</table>

* Numeric properties: E A/PHP lists properties available for numeric search (cf. database description). The search is performed in all fields containing English text. There are no specific display fields, but the hit numeric values will be highlighted. For more information enter HELP NPS.

### 6.7.1 Super-Search-Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
</tbody>
</table>
7 Chemical Abstracts Plus (CAplus)

7.1 Typical queries
- Searches to find out the state of the art in chemistry and chemical processes (text and classification), e.g.:
  - What patents have been published on immunisations against hepatitis B in the last 5 years?
  - Are there any patents on the use of 4,4'-diaminodiphenyl ether-pyromellitic anhydride copolymers?
- Name Searches, e.g.:
  - What patents in the chemical field does Richard Paul Eckberg own?
  - What patents are owned by Stinx & Co.?
- Patent Family Searches, e.g.:
  - In what countries has an application to patent the Japanese invention JP 62111230 been made?
- Monitoring patents

7.2 Brief description
Producer: Chemical Abstracts Service (CAS), USA
Period covered: Since 1907
1907–1966: Images from the printed CA,
More documents before 1907
Size: Chemical Abstracts Plus (CAPlus): more than 9.8 million records on patents,
Chemical Abstracts (CA): more than 7.3 million records on patents (August 2014)
Updated: Chemical Abstracts Plus (CAPlus): daily
Chemical Abstracts (CA): weekly
Language: English

7.3 Contents
- Patents, articles in journals, books, conference reports, technical reports, university publications
- From all fields of chemistry and chemical processes
- Approx. 17% of the annually entered 500,000 documents are patents
- Publications from 60+ countries, the European Patent Office and the PCT, RD (Research Disclosure) publications
- Technical Disclosure from the IP.com Journal (from vol. 1, no. 1, January 2001). IP.com is both an electronic and printed journal (see SO field). The PI (Patent Information) field shows the number with IP as the ‘country’ code. (Technical Disclosure / Defensive Publications can also be searched and published on http://www.ip.com/.)
- Approx. 21,000 documents of journal publications published before 1907, approx. 10,000 US patents from 1900 to 1906, approx. 1,250 US patents from 1808 to 1859
- Enhanced title and abstract in English written by experts
- International patent classification IPC1–8 for basics and family members, online thesaurus incl. catchwords, range searching possible, re-classification of the back-file (main class codes of IPC1–7 available for basics only)
- U.S. classification codes (the current one in the NCL field for basics and equivalents, that at the time of publication in the INCL field for basics only), online thesaurus including catchwords
Patent databases on STN International

- Common Patent Classification (CPC), thesaurus, range searchable
- European Patent Classification (ECLA), thesaurus, range searchable; retained for a limited period of time
- F-TERMS (Japanese classification) since 1/2004
- Additional indexing (keywords, REGISTRY numbers)
- Details of the patent family
- Cited references for journal articles and conference proceedings since 1997
- References to patents (Basic Document; Cited Patents; US, DE, EP, WO since 1997, FR, GB since 2003, CA since 2005, cited patents from nearly 300,000 patent records from 1982 to 2008 additionally; as the Basic Documents are often published applications without references patent citations tend to be incomplete).
- Citing references: the accession numbers of the citing documents are linked
- Legal status information (assignments/reassignments) for US patents since 1980 (US priorities or US equivalents)
- TIFF images of CA abstracts printed between 1907 and 1966 are available in CAPlus; displayable using the PAGE, PAGE.PREV, and PAGE.NEXT formats
- Online thesauri available in the fields: Controlled Terms (/CT), CA Sections/Classification Code (/CC), Roles (/RL), Company Name (/CO), F-Terms (/FTERM), International Patent Classification (/IPC), National Patent Classifications Current (/NCL), National Patent Classifications Issue (/INCL)
- For more detailed information see http://www.cas.org/expertise/cascontent/caplus/patcoverage/

Besides patents, sources for the CA (Chemical Abstracts) file include books, journals, conference reports, technical reports and university publications. Thus, CA is the only database treated here which does not cover exclusively patents.

Patent publications for recording in CA are selected on the basis of EPIDOS data (formerly INPADOC), Vienna. The patents are subject to a restriction by countries (60+ countries, European Patent Organization and World Intellectual Property Organization), by document types and subject area (on the basis of the notations of the International Patent Classification). The criteria are described in the manual Patent Information from Chemical Abstracts Service.

The documents selected for CA are examined whether a document from the same family is already available in the Chemical Abstracts. If no earlier publication is found, the document is recorded as Basic and examined and indexed by an expert. If a corresponding document does exist in the database, the patent family is updated (patent numbers, application numbers).

7.4 Dynamics

Documents in CAplus are altered if further patents on the invention appear (dynamic principle). The database has a number of update fields, which will be amended or overwritten (see section SDI searches). It may be that there are two or more records of the same patent family in the database. In these cases the number in the field FAN.CNT (Family Accession Number Count) is greater than 1. In the following cases 2 or more records are entered for a publication or invention (patent family), i.e. there are 2 or more Basic Documents for one family:

- Certain changes to the patent family (e.g. division or continuation),
- If a publication contains information on too many chemical substances that would exceed the limit of a CA record,
- Starting from 01 July, 2008 for US, DE, GB, FR, CA and EP both the national applications with the oldest priority are entered in a first document and the equivalent WO application are entered in a second document (the WO application frequently having more information including chemical structures). A reference to the second document can be found in the SO field: Chemical Indexing Equivalent to... If only one of the two family document is wanted it is recommended to sort the patent families with FSORT or use the Patent Family Manager.
7.5 Updating

Patent documents are imported a few days up to three weeks after publication, if applicable without complete indexing (see Patent Currency Information) but with the original abstract (partly in original language, e.g. German, French; partly machine translation). The complete indexing will be added within approx. 2 months.


The CAPlus database comprises the data from CA and some additional sources. Updating is done daily.

7.6 Notes

It is recommended to make a cost assessment before starting a search:

- The cost per connect hour is low in CA, SEARCH terms are charged. When searching E# lists (SELECT or EXPAND) or when using TRANSFER, high costs may result quickly.

- The HCA file has a higher connect hour fee but no SEARCH term pricing. When searching E# lists (SELECT or EXPAND) or when using TRANSFER, HCA is, therefore, to be recommended.

- In ZCA no connect hour charges apply but the SEARCH term fee is higher. The Z-files can be recommended for browsing E# lists, e.g. the IPC thesaurus.

7.7 Document from HCAplus

Display format: ALL LSUS

HCAPPLUS COPYRIGHT 2013 ACS on STN
AN 2007:968836 HCAPPLUS
DN 147:279110
ED Entered STN: 30 Aug 2007
TI Curable rubber mix containing silica and ether compound for tires
IN Di Ronza, Raffaele
PA Bridgestone Corporation, Japan
CODEN: EPXXDW
DT Patent
LA English
CC 39-9 (Synthetic Elastomers and Natural Rubber)
FAN. CNT 1

<table>
<thead>
<tr>
<th>PATENT NO.</th>
<th>KIND</th>
<th>DATE</th>
<th>APPLICATION NO.</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP 1826234</td>
<td>A3</td>
<td>20090729</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP 1826234</td>
<td>B1</td>
<td>20120606</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU, RS

IT 2006T00139 A1 20060527 IT 2006-T0139 20060227
IT 1373229 B1 20100419
ES 2367537 T3 20120925 ES 2007-103073 20070226
JP 2007233275 A 20070913 JP 2007-48095 20070227
JP 5117738 B2 20130116
PRAI IT 2006-T0139 A 20060227

CLASS

<table>
<thead>
<tr>
<th>PATENT NO.</th>
<th>CLASS</th>
<th>PATENT FAMILY</th>
<th>CLASSIFICATION CODES</th>
</tr>
</thead>
</table>
### Patent databases on STN International

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECLA B60C0001-00H; C08K0003-36; C08K0005-06; B60C0001-00H; C08K0003-36; C08K0005-06</td>
<td></td>
</tr>
<tr>
<td>IT 2006T00139</td>
<td>IPCI C08K0003-36 [I]; C08K0005-06 [I]; C08L0021-00 [I]; B60C0001-00 [I]</td>
</tr>
<tr>
<td>ECLA B60C0001-00H; C08K0003-36; C08K0005-06</td>
<td></td>
</tr>
<tr>
<td>E5 2387507</td>
<td>IPCI C08K0003-36 [I]; B60C0001-00 [I]; C08K0005-06 [I]; C08L0021-00 [I]; C08L0021-00 [I]; C08K0005-06 [I]; C08L0021-00 [I]</td>
</tr>
<tr>
<td>JP 2007231275</td>
<td>IPCI C08L0021-00 [I]; C08K0003-36 [I]; C08K0005-06 [I]; C08L0021-00 [I]; C08K0003-36 [I]; C08K0005-06 [I]; C08L0021-00 [I]</td>
</tr>
<tr>
<td>US 20070219300</td>
<td>IPCI C08K0005-05 [I]</td>
</tr>
<tr>
<td>NCL 524/386.000; 524/493.000</td>
<td></td>
</tr>
<tr>
<td>ECLA C08K0003-36+L21/00; B60C0001-00H; C08K0005-06+L21/00</td>
<td></td>
</tr>
</tbody>
</table>

**Assignment History for US Patent Available in LSUS Display Format**

**AB**
A curable rubber mix having a crosslinkable unsatd.-chain polymer base, a curing system, and a reinforcing filler system having \( \geq 50\% \) SiO2; the reinforcing filler system has a polyether-polyol compound CR(R')3 (I) with a mol. weight 200-400; where I has R = H or CH2(OCH2CH2)nOH; n = 1-3; R' = CH2(OCH2CH2)nOH. Crosslinkable composition contains SBR and butadiene rubber base, carbon black, silica, a silane bonding agent, zinc oxide, stearic acid, wax, antioxidants, and the polyether-polyol compound, to a fill factor of 66-72%.

**ST**
SBR butadiene rubber S vulcanizable silica hydroxy ether

**IT**
Carbon black, uses

**RL**
TEM (Technical or engineered material use); USES (Uses)
- \( \geq 50\% \) SiO2; the reinforcing filler system has a polyether-polyol compound CR(R')3 (I) with a mol. weight 200-400; where I has R = H or CH2(OCH2CH2)nOH; n = 1-3; R' = CH2(OCH2CH2)nOH. Crosslinkable composition contains SBR and butadiene rubber base, carbon black, silica, a silane bonding agent, zinc oxide, stearic acid, wax, antioxidants, and the polyether-polyol compound, to a fill factor of 66-72%

**IT**
Butadiene rubber, uses

**RL**
POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
- Butadiene rubber; curable rubber mix containing silica reinforcement and other compound for improved storage dynamic modulus and mech. properties for tires

**IT**
Tires
- Treads; curable rubber mix containing silica reinforcement and other compound for improved storage dynamic modulus and mech. properties for tires

**IT**
9003-17-2
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
- Butadiene rubber; curable rubber mix containing silica reinforcement and other compound for improved storage dynamic modulus and mech. properties for tires

**IT**
16603-01-8
RL: MOA (Modifier or additive use); USES (Uses)
- Curable rubber mix containing silica reinforcement and other compound for improved storage dynamic modulus and mech. properties for tires

**IT**
7631-86-9, Silica, uses
RL: TEM (Technical or engineered material use); USES (Uses)
- Curable rubber mix containing silica reinforcement and other compound for improved storage dynamic modulus and mech. properties for tires

**IT**
9003-55-8
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
Guide to STN Patent Databases

(Styrene-butadiene rubber; curable rubber mix containing silica reinforcement and ether compound for improved storage dynamic modulus and mech. properties for tires)

ASSIGNMENT HISTORY FOR US 20070219300

<table>
<thead>
<tr>
<th>LSUS</th>
<th>RAD:</th>
<th>20070604</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAUP:</td>
<td>20070920</td>
<td></td>
</tr>
<tr>
<td>RAK:</td>
<td>ASSIGNMENT OF ASSIGNS INTEREST (SEE DOCUMENT FOR DETAILS).</td>
<td></td>
</tr>
<tr>
<td>PAO:</td>
<td>DI RONZA, RAFFAELE [DATE EXECUTED: 20070326]</td>
<td></td>
</tr>
<tr>
<td>RAC:</td>
<td>BRIDGESTONE CORPORATION, 10-1, KYOBASHI 1-Chome, CHUO-KU, TOKYO 104-8340, JAPAN</td>
<td></td>
</tr>
<tr>
<td>RAA:</td>
<td>SUGHRUE MI ON, PLLC, 2100 PENNSYLVANIA AVENUE, N.W., SUITE 800, WASHINGTON, DC 20037</td>
<td></td>
</tr>
<tr>
<td>MRN:</td>
<td>19408 MFN: 299 (2 Page(s))</td>
<td></td>
</tr>
</tbody>
</table>

### 7.8 Selected Fields

<table>
<thead>
<tr>
<th>CAPLUS</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN, DN</td>
<td>FAN, FAN.CNT</td>
<td>UPP (PI)</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, OBI, TI, IA, AB</td>
<td>TI, AB</td>
<td>TI, AB, GENBANK</td>
</tr>
<tr>
<td>Indexing</td>
<td>CC, CT, CW, ST, IT, RL</td>
<td>CC, CT, IT, ST, RN, RL</td>
<td>CC, CT, IT, ST, RN, RL</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.B, IPC.KW, IPC.ACD, IPC.VER, IPC1-7: IC, ICM, ICS, ICA, ICI, MGR, SGR, CPC: CPC, CPC.ACD, CPC.KW, CPC.VER, NCL, INCL, NCLR, ECLA, FTERM, SC, SX</td>
<td>IPC8: CLASS, IPC, IPC.B, IPC.TAB, IPC.C, IPC.R, IPC.C1, IPC.F</td>
<td>IPC8: IPC, IPC.B, IPC1, IPC.R, IPC.C, IPC.ACD, IPC.KW, IPC.VER, IPC.CPC, IPC.C, IPC.C1, IPC.F</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN, AU*</td>
<td>AU, IN</td>
<td>AU, IN</td>
</tr>
<tr>
<td>Patent assignee / patent holder</td>
<td>PA, CS*, CYA, LO, CN</td>
<td>CS, PA, CYA, LO</td>
<td>CS, CS.DIV, CS.ORG, PA, CYA, LO</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRC.B, PRD, PRD.B, PRY, PRY.B, PRN, PRN.B</td>
<td>APPS, APPS.B</td>
<td>APPS, APPS.B</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AC.B, AD, AD.B, AY, AY.B, APPS, APPS.B, AP, AP.B</td>
<td>DS, DS.B, PCS, PCS.B</td>
<td>APPS, APPS.B</td>
</tr>
<tr>
<td>Citations</td>
<td>RE, RAN.CAPLUS, RAN.MED, RAU, FILE.CIT, RIN, RPG, RPK, RPN, RPY, RIS, RVL, RSO, RWK, RE.CNT, OSC.G, UPOS.G, OSG</td>
<td>RE, RETABLE, REC (RE.CNT)</td>
<td>RAN.CAPLUS, RAN.CAP(n), RAN.MEDLINE, RAN.MED(n), RAU, RE, RE(n), REC, REC.CNT, RETABLE, RIN, RPG, RPN, RPY, RWK, OSC.G, UPOS.G, OSG</td>
</tr>
<tr>
<td>Legal Status</td>
<td>LSUS</td>
<td>Sources</td>
<td>SO, OS, VI, VL</td>
</tr>
<tr>
<td>Other</td>
<td>DT, LA, CK, AV, FA, FS</td>
<td>DT, LA, CK, GI, FS</td>
<td>DT, LA, CIT, CK, HIT, FS</td>
</tr>
</tbody>
</table>

* For patents IN resp. PA, for other bibliographic information AU resp. CS.
### 7.8.1 Super-Search-Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>Application Number Group, Basic</td>
<td>APPS.B</td>
<td>AP.B, PRN.B</td>
</tr>
<tr>
<td>International Patent Classification, Old</td>
<td>IPC.OLD</td>
<td>IC, ICA, ICI</td>
</tr>
<tr>
<td>International Patent Classification</td>
<td>IPC</td>
<td>ICM, ICS, ICA, ICI</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, DS</td>
</tr>
<tr>
<td>Patent Countries Group, Basic</td>
<td>PCS.B</td>
<td>PC.B, DS.B</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN</td>
</tr>
<tr>
<td>Patent Number Group, Basic</td>
<td>PATS.B</td>
<td>PN.B</td>
</tr>
</tbody>
</table>
Guide to STN Patent Databases

8 CNFULL

8.1 Typical queries

- Searches for the state of the art in CN publications (text and classification), e.g.:
  - What CN applications are there on photo-voltaic cells?

- Name searches (inventor, applicant), e.g.:
  - What CN applications of CHANGZHOU TRINASOLAR CO LTD were published during the past year?
  - What CN applications are there of Mr MENG JIANG together with Mr ZHEN ZHANG?

- Searches using formal data (e.g. numbers), e.g.:
  - What is the text of the CN utility model numbered CN 202373282?
  - We are looking for the full-text of an application of HUAWEI TECH CO LTD of August 8, 2012.

- Full-text display of CN patents:
  - What are the claims of the CN patent numbered CN 102630137?

- Numeric Property Search in the context of the fulltext
  - Search for a length in the nanometer range

- Display of legal status data

- Monitoring CN applications

- Using the full-text to find material for an opposition

- Multi-file searches in combination with other national or regional patent databases

8.2 Brief description

Producer: Questel, France
Period covered: Since 1985
Size: More than 7.6 million documentation units on patents and utility models, more than 7.6 million full texts, more than 5.8 million images (August 2014)
Updated: Weekly
Languages: English

8.3 Contents

- Full text of patent applications, granted patents and utility models published in the People’s Republic of China

- Bibliographical details including patent assignee, inventors and related PCT applications

- Titles and abstracts are entered as machine translations first, they are replaced by manual translations after three months, the descriptions and claims are machine-translated

- International Patent Classification IPC1-8, IPC thesaurus, range searchable

- Cooperative Patent Classification (CPC), thesaurus, range searchable

- European Patent Classification (ECLA), ECLA thesaurus, range searchable; other European classifications: ICO, IDT
Patent databases on STN International

- Legal status information from INPADOCDB can be displayed (LS, LS2, FAM and CFAM fields), but is not searchable
- Drawings from the first page of the publication, if available
- Numeric values of more than 30 physical and chemical properties in almost 400 units (Version 1)

8.4 Dynamics
The CNFULL database follows a mixed principle using segmentation. All publications of the same patent application form one documentation unit. Each document is entered into a separate record and will not be updated. The legal status from INPADOCDB is updated.

8.5 Updating
Publications appear in CNFULL 1 to 3 weeks after the date of publication.

8.6 Document from CNFULL
Display format: MAXG LS

CNSCOPYRIGHT 2012 QUESTEL on STN.

AN  2011000608  CNFULL  ED 20120202  UP 20120827  EDTX 20120202  Full-text
TI  Safe self-destroying injector
IN  XIN HUO
PA  GUANGDONG KANGERMEI MEDICAL DEVICES CO LTD
LAF  English
LA  English
DT  Patent; (Full-text)
PI  CN 102038989 A
PT  CNA UNEXAMINED APPLICATION FOR A PATENT FOR INV.
PI  CN 1011-10026962 A
AI  CN 2011-10026962 20110125
PI  CN 2011-10026962 20110125
IPCI  A61M0005-50 [I,A]; A61M0005-31 [I,A]; A61M0005-315 [I,A]

AB  Equivalent
The invention provides a safe self-destroying injector, which comprises an outer shell, a core bar, a core bar rubber stopper, a core bar cover, a core bar lock catch, an injection needle, a needle bed, a spring, a safety spring storage room and the outer cover of the safety spring storage room. Wherein the core bar rubber stopper is arranged at the lower end of the core bar; the core bar cover is assembled on the core bar; the core bar lock catch is fixed on the upper inner wall of the...
One kind of safety self-destruction injector

Area of technology

This invention involves the injector technology, especially involves one kind of safety self-destruction injector.

Background technology

In the clinical care process, many sickness patients frequently need to carry on the injection treatment, by through injection solution treatment method treatment disease and rescue sickness patient. Therefore, the injection is carries on science to treat and rescue the important medical technology measure of patient. The injector is at...

CLM

1. Kinds of safety self-destruction injectors, its characteristic lies in: The establishment has the coat, core bar and core bar rubber plug and core bar lid and core bar lock catch, hypodermic needle, needle valve seat, spring and restraining spring storage room and restraining spring storage room outer cover; Stated the core bar rubber plug establishment to state under the core bar the nose, states the core bar to cover the assembly to state the core bar, states the core bar lock catch to fix in states on the coat the endophragm, states the core bar establishment to state the coat; Stated the restraining spring storage room with state the coat permanent connection, states restraining spring storage room establishment willow to open the installment; Stated the needle valve seat establishment to have the head end and end, states the hypodermic needle to fix in states the head end, end states loaded in states the restraining spring storage room, states the head end to load in states the restraining spring storage room outer cover, states the restraining spring storage room with state the restraining spring storage room outer cover permanent connection, states the spring pocket to suppose in states the needle valve seat, and end stated a spring termination to state, states another termination of spring to state the restraining spring storage room outer cover's interior.

2. The safety self-destruction injector that according to claim 1 station, its characteristic lies in: Stated the core bar establishment to have the safety self-destruction switch column, states the safety self-destruction switch column to fix in states the core bar...

AN 2011000608 CNFULL ED 20120824 UP 20120901 EDTX 20120202 Full-text
TI Safe self-destroying injector
PA GUANGDONG KANGERMEI MEDICAL DEVICES CO., LTD.
LAF English
LA English
DT Patent; (Full text)
PIT CNB EXAMINED APPLICATION [FROM 19850401 UNTIL 19921231] or GRANTED PATENT FOR INVENTION
PI CN 102038989 B 20120801
AI CN 2011-10026962 20110125
PRAI CN 2011-10026962 20110125
IPCI A61M0005-50 [I,A]; A61M0005-31 [I,A]; A61M0005-315 [I,A]
AB Equivalent
The invention provides a safe self-destroying injector, which comprises an outer shell, a core bar, a core bar rubber stopper, a core bar cover, a core bar lock catch, an injection needle, a needle bed, a spring, a safety spring storage room and the outer cover of the safety spring storage room, wherein the core bar rubber stopper is arranged at the lower end of the core bar; the core bar cover is...

DETD One kind of safety self-destruction injector

50
Area of technology

This invention involves the injector technology, especially involves one kind of safety self-destruction injector.

Background technology

In the clinical care process, many sickness patients frequently need to carry on the injection treatment, by through injection solution treatment method treatment disease and rescue sickness patient. Therefore, the injection is carries on science to treat and rescue the important medical technology measure of patient. The injector is at ...

CLM

1. Kinds of safety self-destruction injectors, its characteristic lies in: The establishment has the coat, core bar and core bar rubber plug and core bar lid and core bar lock catch, hypodermic needle, needle valve seat, spring and restraining spring storage room and restraining spring storage room outer cover. Stated the core bar rubber plug establishment to state under the core bar the nose, states the core bar...
Guide to STN Patent Databases

8.7 Selected Fields

<table>
<thead>
<tr>
<th>CNFULL</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, EDTX, UP, DED, DUPD</td>
<td>AN ED, EDTX, UP, DED, DUPD</td>
<td>AN ED, EDTX, UP, DED</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, Ti, AB CLM, MCLM</td>
<td>Ti AB (ABS); CLM, DETD, MCLM</td>
<td>Ti AB CLM, MCLM, DETD</td>
</tr>
<tr>
<td>Numeric properties</td>
<td>PHP*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
</tr>
<tr>
<td>Patent assignee / patent holder</td>
<td>PA (CS), PA.CNY</td>
<td>PA (CS), PA.CNY</td>
<td>PA (CS), PA.CNY</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRDF, PRY, PRYF PRN, PRNO, APPS</td>
<td>PRN (PRAI) PRYF, PRNO (PRAO)</td>
<td>PRC, PRD, PROF, PRK, PRY, PRYF PRN (PRAI), PRNO, APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AP APPS</td>
<td>AI (AP)</td>
<td>AI (AP), AC, AD, AP AP, APPS, PCS</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PY, PK, PIT PN, PNK, PNO</td>
<td>PI (PN, PATS), PIT PNO</td>
<td>PI (PN, PATS), PC, PD, PY, PK, PIT PN, PNK, PNO</td>
</tr>
<tr>
<td>Related documents</td>
<td>RLC, RLD, RLY, RLN</td>
<td>RLI (RLN) RLC, RLN, RLD, RLY</td>
<td>RLC, RLN, RLD, RLY</td>
</tr>
<tr>
<td>Legal status</td>
<td>LS, LS2, FAM, CFAM</td>
<td>LS, LS2</td>
<td>LS, LS2</td>
</tr>
<tr>
<td>Other</td>
<td>CLMN, DETN, DT, GIS, GIT, LA, LAF, FA</td>
<td>CLMN, DETN, DT, GI, GIS, GIT, LA, LAF, FA</td>
<td>CLMN, DETN, DT, GIS, GIT, LA, LAF, FA</td>
</tr>
</tbody>
</table>

* Numeric properties: E A/PHP lists properties available for numeric search (cf. database description). The search is performed in all fields containing English text. There are no specific display fields, but the hit numeric values will be highlighted. For more information enter HELP NPS.

8.7.1 Super-Search-Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
</tbody>
</table>
9 DEFINULL

9.1 Typical queries

- Searches for the state of the art in DE publications (text and classification), e.g.:
  - What DE applications are there on electrical surgical instruments?
  - What DE patents are there on hybrid drives?
- Name searches (inventor, applicant), e.g.:
  - What DE applications of SUZUKI MOTOR CORPORATION were published during the past year?
  - What DE patents are there by Mr GEORG WITTMANN of DEHN & SOEHNE?
- Searches using formal data (e.g. numbers), e.g.:
  - What is the text of the DE utility model numbered DE 20 2013 004 927?
  - We are looking for DE publications in the field of A61L 27 (Materials for prostheses) with DE as the priority country and 2008 to 2012 as the priority year.
- Numeric Property Search in the context of the fulltext
  - Search for a length in the nanometer range
- Full-text display of DE applications:
  - What are the claims of the DE patent numbered 10 2012 010 676?
- Display of legal status data
- Monitoring DE applications
- Using the full-text to find material for an opposition
- Multi-file searches in combination with other national or regional patent databases

9.2 Brief description

Producer: Questel, France
Period covered: Since 1877 (gradually extended backwards)
Size: More than 5.9 million documentation units of patents and utility models,
more than 2.4 million full texts,
more than 787,000 patent images (August 2014)
Updated: Weekly
Languages: English, German

9.3 Contents

- Full text of German patent applications, granted patents and utility models published by the Patent Office of the German Reich (Reichspatentamt) and the German Patent and Trademark Office (since 1877, in PATDPFULL since 1979)
- The full texts are available in German and English (machine-translated)
- For translations of WO applications and EP applications into German (DET publications) only the full text in German is available. The searchable original texts in English can be found in EPFULL and PCTFULL, respectively.
- Bibliographical details including patent assignee, inventors and representative
Guide to STN Patent Databases

- International Patent Classification (IPC), IPC thesaurus, range searchable
- Cooperative Patent Classification (CPC), thesaurus, range searchable (not in PATDPAFULL)
- Details of related documents
- Drawings
- Legal status, citation and family data come from INPADOCDB and can be displayed in the LS, LS2, RE, FAM and CFAM fields. These data are not searchable.
- Numeric values of more than 55 physical and chemical properties in all full-text fields
- Some of the texts are created using an Optical Character Recognition (OCR) software, i.e. there may be errors and omissions of text portions

9.4 Dynamics

The DEFULL database follows a mixed principle using segmentation. All publications of the same patent application form one documentation unit. Each document is entered into a separate record and will not be updated. The legal status in INPADOCDB is continuously updated.

9.5 Updating

New data are entered in the database about 10 days after the publication date.

9.6 Document from DEFULL

Display format: MAXG

Full text of the OPI publication (Offenlegungsschrift) in German and machine translation in English

AN 2012037470 DEFULL ED 20131220 UP 20131220 EDTX 20131220
TIEN Cam Shaft Adjustment Device
TIDE Nockenwellenverstell einrichtung
IN WEBER JUERGEN, DE; HEINEMANN ROBERT, DE
PA Schaeffler Technologies AG & Co. KG, 91074 Herzogenaurach, DE
LAF German
LA German
DT Patent: (Full text)
PT DE AE DOC. LAID OPEN (FIRST PUBLICATION)
P1 DE 102012208496 A1 20131128
AI DE 2012-102012208496 20120522
PRAI DE 2012-102012208496 20120522
IPCI F01L0001-344 [I, A]
CPC F01L0001-047; F01L2103-00; F01L0001-3442

ABEN The invention relates to a camshaft adjusting device (19) having a camshaft adjuster (4), comprising a stator (36), a rotor (38) which can be rotated relative to the stator (36) about a rotational axis (74), and a hub (52) which is arranged on the rotor (38) or on the stator (36) and...

ABDE Die Erfindung betrifft eine Nockenwellenverstell einrichtung (19) mit einem Nockenwellenversteller (4), umfassend einen Stator (36), einen gegenüber dem Stator (36) um eine Rotationsachse (74) relativ verdrehbaren Rotor (38) und eine am Rotor (38) oder am Stator (36)...

DETDEN Area of the Invention

[0001] The Invention concerns a Cam Shaft Adjustment Device with a camshaft Masquerader, comprehensively a Stator, a Rotor relatively rotatable opposite the Stator around a Rotation Axle and at the Rotor or at the
1. Cam Shaft Adjustment Device (19) by a cam shaft Masquerader (4), comprehensively a Stator (36), one opposite the Stator (36) around a Rotation Axle (74) relatively rotatable Rotor (38) and one in the Rotor (38) or in the Stator (36) arranged Hub (52) by a Supporting Bushing (62), as well as by one in the Admission Beech (62) taken up Cam Shaft (12), by the fact marked that the Cam Shaft (12) is radially fixed in the Supporting Bushing (62) over at least three Spacer Elements (64).

2. Cam Shaft Adjustment Device (19) according to claim 1, by the fact characterized that at least two of the Spacer Elements (64) are to each other arranged transferred in axial Direction.

Full text of the granted patent (Patentschrift) in German and machine translation in English

The invention relates to a camshaft adjusting device (19) having a camshaft adjuster (4), comprising a stator (36), a rotor (38) which can be rotated relative to the stator (36) about a rotational axis (74), and a hub (52) which is arranged on the rotor (38) or on the stator (36) and... (From WO2013174543 A1)
Area of the Invention

[0001] The Invention concerns a Cam Shaft Adjustment Device with a cam shaft Masquerader, comprehensively a Stator, a Rotor relatively rotatable opposite the Stator around a Rotation Axle and at the Rotor or at the

CLMEN

1. Cam Shaft Adjustment Device (19) by a cam shaft Masquerader (4), comprehensively a Stator (36), one opposite the Stator (36) around a Rotation Axle (74) relatively rotatable Rotor (38) and one in the Rotor (38) or in the Stator (36) arranged Hub (52) by a Supporting Bushing (62), as well as by one in the Admission Beech (62) taken up Cam Shaft (12), by the fact marked that the Cam Shaft (12) is radially fixed in the Supporting Bushing (62) over at least three Spacer Elements (64).
2. Cam Shaft Adjustment Device (19) according to claim 1, by the fact characterized that at least two of the Spacer Elements (64) are to each other arranged transferred in axial Direction.

DETDDE

Gebiet der Erfindung

[0001] Die Erfindung betrifft eine NockenwellenverstellEinrichtung mit einem Nockenwellenversteller, umfassend einen Stator, einen gegenueber dem Stator um eine Rotationsachse relativ verdrehbaren Rotor und eine am

CLMDE

1. NockenwellenverstellEinrichtung (19) mit einem Nockenwellenversteller (4), umfassend einen Stator (36), einen gegenueber dem Stator (36) um eine Rotationsachse (74) relativ verdrehbaren Rotor (38) und eine am Rotor (38) oder am Stator (36) angeordnete Nabe (52) mit einer Aufnahmebuchse (62), sowie mit einer in der Aufnahmebuchse (62) aufgenommenen Nockenwelle (12), dadurch gekennzeichnet, dass die Nockenwelle (12) in der Aufnahmebuchse (62) über wenigstens drei Abstandselemente (64) radial festgelegt ist.
2. NockenwellenverstellEinrichtung (19) nach Anspruch 1, dadurch gekennzeichnet, dass wenigstens zwei der Abstandselemente (64) in axialer Richtung zueinander versetzt angeordnet sind.
9.7 Selected Fields

<table>
<thead>
<tr>
<th>DEFULL</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN, ED, EDTX, UP</td>
<td>AN, ED, EDTX, UP</td>
<td>AN, ED, EDTX, UP</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, TIDE, TIEN, AB, ABDE, ABEN, CLM, CLMDE, CLMEN, MCLM, MCLMDE, MCLMEN</td>
<td>TI, TIDE, TIEN, AB (ABE), ABDE, ABEN, CLM, CLMDE, CLMEN, MCLM, MCLMDE, MCLMEN DETD, DETDE, DETEN</td>
<td>TI, TIDE, TIEN, AB, ABDE, ABEN, CLM, CLMDE, CLMEN, MCLM, MCLMDE, MCLMEN DETD, DETDE, DETDEN</td>
</tr>
<tr>
<td>Numerical properties</td>
<td>PHP*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER, IPC, IPCR, IPC.REF, IPC1-7: IC, ICM, ICS, CPC: CPC, CPC.ACD, CPC.KW, CPC.VER</td>
<td>IPC8: IPC, IPC.TAB, IPCI, IPCR</td>
<td>IPC8: IPC, IPCI, IPCR, IPC.REF, IPC.A, IPC.AI, IPC.F, IPC.C, IPC.CPC</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS), PA.CNY</td>
<td>PA (CS), PA.CNY</td>
<td>PA (CS), PA.CNY, PAA</td>
</tr>
<tr>
<td>Agent</td>
<td>AG</td>
<td>AG</td>
<td>AG</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRDF, PRY, PRYF, PRN, PRNO, APPS</td>
<td>PRN (PRIA)</td>
<td>PRC, PRD, PRDF, PRK, PRY, PRYF, PRN (PRIA), PRNO, APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AY, AP, APO, APPS</td>
<td>AI (AP)</td>
<td>AI (AP), AC, AD, AY, AP, APPS, APO, PCS</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PY, PK, PIT, PN, PNK, PNO</td>
<td>PI (PN, PATS), PIT, PNO</td>
<td>PI (PN, PATS), PC, PD, PY, PK, PIT, PN, PNK, PNO</td>
</tr>
<tr>
<td>Related documents</td>
<td>RLC, RLD, RLY, RLN</td>
<td>RLI (RLN)</td>
<td>RLC, RLD, RLY, RLY</td>
</tr>
<tr>
<td>Legal status</td>
<td>LS, LS2, FAM, CFAM</td>
<td>LS, LS2</td>
<td>LS, LS2</td>
</tr>
<tr>
<td>Citations</td>
<td>RE</td>
<td>RE</td>
<td>RE</td>
</tr>
<tr>
<td>Other</td>
<td>CLMN, DETN, DT, LA, LAF, FA, GI, GIS</td>
<td>CLMN, DETN, DT, LA, LAF, FA, GI, GIS, GIT</td>
<td>CLMN, DETN, DT, LA, LAF, FA, GIS, GIT</td>
</tr>
</tbody>
</table>

* Numeric properties: E A/PHP lists properties available for numeric search (cf. database description). The search is performed in all fields containing English text. There are no specific display fields, but the hit numeric values will be highlighted. For more information enter HELP NPS.

9.7.1 Super-Search-Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
</tbody>
</table>
10 Derwent Geneseq (DGENE)

10.1 Brief description
Producer: Thomson Reuters (Professional) Ltd, UK
Period covered: Since 1981
Size: More than 37.5 million sequence documents of patents and utility models (August 2014)
Nucleic acids: 28.6 million
Amino acids: 8.9 million
Updated: Biweekly
Language: English

10.2 Contents
- Patent documents from all countries and international authorities covered in World Patents Index
- One record per sequence indexed
- Bibliographical details of the underlying Basic document
- Legal status information from INPADOCDB can be displayed (LS and LS2 fields) but is not searchable in DGENE
- Data on: nucleic acids (nucleotide sequences of 9 or more bases), amino acids (with 3 or more residues) from the underlying basic document: extended title, special abstract (prepared by a Derwent indexer), description, keywords, sequence data, information on features

Sequence data can be searched with the RUN package ‘GETSEQ’. Homology searching of protein and nucleotide sequences is possible with the RUN packages, ‘GETSIM’ or ‘BLAST’.

10.3 Dynamics
One invention may include several sequences. In DGENE, one record is entered per sequence. The records in the DGENE database are not updated (static principle). (The legal status information from INPADOC is updated.)

10.4 Updating
New data are imported approx. 2 months after publication.
The present invention relates to a novel method for ultra high throughput screening of a library of binding molecules to identify a binding molecule having selective affinity for a ligand by contacting an immobilized population of binding molecules with at least one ligand, and identifying at least one binding molecule, which selectively binds to at least one of the ligands. The patentees also claim: a method for enhancing the detection of the interaction of one or more binding molecules with at least one ligand; and a method for generating an expression library. Generating an expression library comprises generating, in an expression vector, a library of clones comprising polynucleotides encoding molecules ligated to a polynucleotide encoding a selectable marker useful for the selection of clones expressing functional molecules, and growing the library of clones generated under conditions, which select for clones expressing functional molecules. Preferably, the expression vector is an Escherichia coli expression vector, where the E. coli expression vector is pUCKA. The methods are useful for screening a library of binding molecules to identify a binding molecule having selective affinity for a ligand, enhancing the detection of the interaction of one or more binding molecules with at least one ligand, and generating an expression library. The present sequence is that of the signal peptide of the beta-lactamase gene encoded by the preferred pUCKA expression vector of the invention. NOTE: The present sequence (shown as SEQ ID NO: 7 in the sequence listing) differs from the sequence shown in example 3, page 18 of the specification which is also shown as SEQ ID NO: 7 (AEH30750).
10.6 **Selected Fields**

<table>
<thead>
<tr>
<th>DGENE</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN, CR (XR)</td>
<td>AN, CR (XR)</td>
<td>AN, CR</td>
</tr>
<tr>
<td></td>
<td>DED, ED, UP</td>
<td>DED</td>
<td>DED</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, DESC, KW, ORGN, TI</td>
<td>TI, KW, AB, DESC, ORGN</td>
<td>AB, KW, ORGN, TI</td>
</tr>
<tr>
<td>Indexing</td>
<td>AA, AA.CNT</td>
<td>AA</td>
<td>AA</td>
</tr>
<tr>
<td></td>
<td>NA, NA.CNT</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>FEAT, MTY, SQL, PSL</td>
<td>FEAT, MTY, SQL, PSL</td>
<td>FEAT, MTY, SQL, PSL</td>
</tr>
<tr>
<td></td>
<td>SQEP, SQEFP, SQSP, SQSFP, SQEN, SQSN*</td>
<td>SEQ, SEQ3</td>
<td>SEQ, SEQ3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SCORE</td>
<td>SCORE</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU)</td>
<td>IN (AU)</td>
<td>IN</td>
</tr>
<tr>
<td>Patent assignee / patent holder</td>
<td>PA, (CS), PACO</td>
<td>PA (CS)</td>
<td>PA, PACO</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRDF, PRN, PRY, PRYF</td>
<td>PRAI (PRN)</td>
<td>PRAI, PRC, PRD, PRDF, PRN, PRY, PRYF, APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AP, APPS, AY</td>
<td>AI (AP), APPS</td>
<td>AC, AD, AI, AP, APPS, AY</td>
</tr>
<tr>
<td>Publication data</td>
<td>PATS, PC, PCS, PD, PK, PN, PY</td>
<td>PI (PN), PATS</td>
<td>PATS, PC, PCS, PD, PI, PK, PN, PY</td>
</tr>
<tr>
<td>Sources</td>
<td>OS</td>
<td>OS</td>
<td>OS</td>
</tr>
<tr>
<td>Other</td>
<td>DT, FS, LA</td>
<td>DT, FS, LA</td>
<td>DT, FS, LA</td>
</tr>
</tbody>
</table>

* Use one of the RUN packages GETSEQ, GETSIM, or BLAST to retrieve sequence data in the SQ? fields.

10.6.1 **Super-Search Fields**

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN</td>
</tr>
</tbody>
</table>
11 Derwent Patents Citation Index (DPCI)

11.1 Typical queries
- See section Citation Search
- Citations searches for 23 countries:
  - What patents are cited in US patent, 6,269,141 of Philips? Has this patent been cited in later patents?
  - Has anybody cited patent no. DE 42 08 777?
- Citation statistics:
  - What companies do cite the patents of Philips most often?
  - Which are the most frequently cited patents of Philips?
  - Which patents on the subject of computer tomography are cited most often?

11.2 Brief description
Producer: Thomson Reuters (Professional) Ltd, UK
Period covered: Since 1973
Size: More than 14.7 million documents of patents and utility models (August 2014)
Updated: Weekly
Language: English

11.3 Contents
- Details of cited and citing patent publications and cited non-patent literature
- Citations by examiners, inventors and authors, opponents and third parties in the determination of patentability
- Bibliographical details with enhanced patent titles, patent assignee code (PACO), family details, see DWPI
- Data content streamlined to focus on citation searching – no IPC and no Derwent Indexing of the patent family, however, citations are entered with the Examiner Field of Search (IPC or national US Classification)
- Patents citing patents from the stem family (Master Patent) are also included and updated
- DPCI uses the same Accession Number as DWPI (crossover)
- Country coverage:

<table>
<thead>
<tr>
<th>Country</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>01/1993–</td>
</tr>
<tr>
<td>BE</td>
<td>01/1988–</td>
</tr>
<tr>
<td>CH</td>
<td>01/1986–</td>
</tr>
<tr>
<td>CN</td>
<td>01/2010–</td>
</tr>
<tr>
<td>CZ</td>
<td>06/2006–</td>
</tr>
<tr>
<td>DE</td>
<td>01/1974–</td>
</tr>
<tr>
<td>EP</td>
<td>12/1978–</td>
</tr>
<tr>
<td>ES</td>
<td>01/1993–</td>
</tr>
<tr>
<td>FR</td>
<td>01/1974–</td>
</tr>
<tr>
<td>GB</td>
<td>01/1979–</td>
</tr>
<tr>
<td>JP</td>
<td>01/1994–</td>
</tr>
<tr>
<td>KR</td>
<td>01/2008–</td>
</tr>
<tr>
<td>LU</td>
<td>06/1999–</td>
</tr>
<tr>
<td>MY</td>
<td>01/2010–</td>
</tr>
<tr>
<td>NL</td>
<td>01/1974–</td>
</tr>
<tr>
<td>PH</td>
<td>11/2009–</td>
</tr>
<tr>
<td>RU</td>
<td>06/2009–</td>
</tr>
<tr>
<td>SG</td>
<td>03/2001–</td>
</tr>
<tr>
<td>US</td>
<td>01/1970–</td>
</tr>
<tr>
<td>WO</td>
<td>10/1978–</td>
</tr>
</tbody>
</table>
Countries with limited coverage:

<table>
<thead>
<tr>
<th>Country</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>03/1994</td>
<td>05/1996</td>
</tr>
<tr>
<td>CA</td>
<td>01/1994</td>
<td>07/1996</td>
</tr>
<tr>
<td>SE</td>
<td>04/1994</td>
<td>09/1996</td>
</tr>
</tbody>
</table>

11.4 Dynamics

Documents in DPCI follow the dynamic principle (cf. DWPI). In addition to family data, citation data are added regularly. The latest update is noted in the respective update field.

11.5 Updating

New publications (bibliographical details) are entered approx. 5 weeks after publication.

11.6 Document from DPCI

Display Format: ALL

AN 2003-846251 [200379] DPCI
TI Internal combustion engine operating method, by burning supplementary fuel injected while outlet valve is open
IN BAEUERLE M, REISINGER C
PA (BOSCH-C) BOSCH GMBH ROBERT
CYC 3
PI DE 10217238 A1 20031106 (200379) * DE 9[4] <-
FR 2838773 A1 20031024 (200382) FR <-
DE 10217238 B4 20060216 (200613) DE <-
IT 1348108 B 20081022 (200931) IT
ADT DE 10217238 A1 DE 2002-10217238 20020418; IT 1348108 B IT 2003-11732
20030410; FR 2838773 A1 FR 2003-4811 20030417
PRAI DE 2002-10217238 20020418

CTS CITATION COUNTERS
-----------------------------------------------
PNC.D 7 Cited Patents Count
PNC.G 7 Citing Patents Count
IAC.D 3 Cited Issuing Authority Count
IAC.G 5 Citing Issuing Authority Count
CRC 2 Cited Literature Reference Count
OSC.D 6 Cited Patent WPI Accession Number Count
OSC.G 5 Citing Patent WPI Accession Number Count

EXAMINERS FIELD OF SEARCH
-----------------------------------------------
IC F02D023-02; F02D041-38

Citations
-----------------------------------------------
Cited Publication By Accession Number
-----------------------------------------------
DE 10038974 A1 E 2002-374240
DE 19721933 A1 E 1999-025376
DE 19944190 A1 E 2001-275088
DE 19951096 A1 E 2001-452555
DE 19951096 C2 E 2001-452555
EP 1074714 A1 E 2001-193166
US 5207058 A E 1993-158581

Literature Citations
-----------------------------------------------
By Literature Reference
-----------------------------------------------
Citations

<table>
<thead>
<tr>
<th>Citing Publication</th>
<th>By</th>
<th>Accession Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE 10308789 A1</td>
<td>E</td>
<td>2004-668219</td>
</tr>
<tr>
<td>DE 102004019021 A1</td>
<td>E</td>
<td>2005-760569</td>
</tr>
<tr>
<td>EP 1591651 A1</td>
<td>E</td>
<td>2005-772003</td>
</tr>
<tr>
<td>EP 1591651 B1</td>
<td>E</td>
<td>2005-772003</td>
</tr>
<tr>
<td>FR 2064161 A1</td>
<td>E</td>
<td>2005-437349</td>
</tr>
<tr>
<td>US 7213565 B2</td>
<td>E</td>
<td>2004-668219</td>
</tr>
<tr>
<td>WO 2006123760 A1</td>
<td>E</td>
<td>2007-150498</td>
</tr>
</tbody>
</table>

11.7 Selected Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, DS</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, FDT</td>
</tr>
</tbody>
</table>
12 Derwent World Patents Index (WPINDEX, WPIIDS, WPIX)

12.1 Typical queries

- Searches for the state of the art / searches for information / searches in respect of novelty (text, classification, and indexing), e.g.:
  - What is the state of the art world-wide for Brakes for inline skates?
- Name searches (inventor, applicant), e.g.:
  - What patents does a certain B. Clinton have on the Treatment of rheumatoid arthritis?
  - What patents does FIAT own on Airbags?
- Searches using formal data (numbers: publication number, application number), e.g.:
  - What is contained in the US patent numbered 645532 (patent or application number)?
  - What is the content of the examined Japanese application, JP 2738976?
- Family searches:
  - Is there an equivalent to NEC CORP's Japanese application, JP 2710608, in English?
  - In what countries have Philips applied for patent rights on the priority number NL 83-1445?
- SDI searches

12.2 Brief description

Producer: Thomson Reuters (Professional) Ltd, UK
Period covered: Since 1963
Size: More than 26.7 million records for patents and utility models, more than 18.3 million patent drawings (August 2014)
Updated: Several times per week (82 updates per year)
Languages: English, French, German, (Spanish)

12.3 Contents

- Extracts from the patents documents of 50+ patent organisations, including EP and WIPO
- Numerical values of more than 55 physical and chemical properties in approx. 1,800 units (Version 2)
- Documents consist of an Invention Level and a Publication Level, both levels can be searched and displayed separately
- Invention Level:
  - Bibliographical details of the patent family, including language information for each family member
  - A newly formulated, enhanced title
  - Structured abstracts (AB), 750 000 Documentation Abstracts (ABDT, from the years 1995-1999), Extension Abstracts in WPIX (in CPI file segment) from 1999
  - Names of inventors and patent assignees; additional patent assignee code (with online dictionary)
Patent databases on STN International

- Graphics (patent drawings, chemical structures)
- Current International Patent Classification (including re-classification), IPC thesaurus
- Cooperative Patent Classification (CPC), thesaurus, range searchable
- European Patent Classification (ECLA) with online thesaurus, other European classifications: ICO (In Computer Only), no longer assigned from 1/2013, existing codes are kept as historical classification data
- U.S. National Classification with online thesaurus, will no longer be assigned after transition period (c. 2015) and be replaced by CPC, existing codes will be kept as historical classification data
- Derwent Classification and Manual Codes (Electrical Patents Index)
- Derwent Chemistry Resource (DCR) from Derwent week 16/1999: Additional indexing and structure searching
- Japanese FI and FTERMS (since 1966) with online thesaurus
- Additional indexing for chemical patents (accessible only for subscribers of Derwent services in WPIX and WPIDS)

Publication Level:
- Bibliographical details of the original and selected data for each family member (available from selected patent offices only)
- Original title, full inventor and assignee names plus agent details, including address details, original abstract and main claim
- Additional abstract (ABEQ, structured, or main claim), if considered necessary
- International Patent Classification from the original publication, re-assigned IPC for the respective publication, IPC thesaurus
- Original US Classification from 1975

The World Patents Index is accessible at three user levels:

- WPINDEX—all STN users
- WPIDS—subscribers
- WPIX—selected subscribers

Coverage at invention level starts in various years for the individual subject areas (also depending on the country, see appendix):

- Pharmaceuticals: 1963
- Agricultural chemicals: 1965
- Plastics and polymers: 1966
- Other fields of chemistry: 1970
- Mechanics, electrical engineering, other fields of engineering: 1974

Coverage at publication level also varies, depending on the country:
Original text data:

<table>
<thead>
<tr>
<th>Country</th>
<th>Title</th>
<th>Abstract</th>
<th>Main claim</th>
<th>All claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>2004-</td>
<td>2010-</td>
<td>2010-</td>
<td></td>
</tr>
<tr>
<td>BR</td>
<td>2010-</td>
<td>2010-</td>
<td>2010-</td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>1968-</td>
<td>2000-</td>
<td>1968-</td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>2010-</td>
<td>2010-</td>
<td>2010-</td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td>2009-</td>
<td>2009-</td>
<td>2009-</td>
<td></td>
</tr>
<tr>
<td>IN</td>
<td>2009-</td>
<td>2009-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KR</td>
<td>2008-</td>
<td>2008-7</td>
<td>2008-7</td>
<td>2008-7</td>
</tr>
<tr>
<td>MY</td>
<td>2010-</td>
<td>2010-</td>
<td>2010-</td>
<td></td>
</tr>
<tr>
<td>TH</td>
<td>2010-8</td>
<td>2010-8</td>
<td>2010-8</td>
<td></td>
</tr>
<tr>
<td>TW</td>
<td>2008-</td>
<td>2008-</td>
<td>2008-</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>1975-</td>
<td>1975-</td>
<td>1993-</td>
<td></td>
</tr>
<tr>
<td>VN</td>
<td>2010-10,8</td>
<td>2010-10,8</td>
<td>2010-10,8</td>
<td></td>
</tr>
<tr>
<td>WO</td>
<td>1978-</td>
<td>1978-</td>
<td>1978-</td>
<td></td>
</tr>
</tbody>
</table>

1 German; 2 Portuguese; 3 Spanish; 4 English, French, German; 5 Applications in English; 6 Applications in French or German; 7 Machine (assisted) translation; 8 Human translation; 9 Patent applications; 10 Patents; 11 Utility models

Bibliographical details of original documents (incomplete bibliographical details are available from other countries):

<table>
<thead>
<tr>
<th>Country</th>
<th>Inventor</th>
<th>Applicant</th>
<th>Agent</th>
<th>APTS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR</td>
<td>2010-</td>
<td>2010-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN</td>
<td>2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>1968-</td>
<td>1968-</td>
<td>1968-</td>
<td>1968-</td>
</tr>
<tr>
<td>ES</td>
<td>2010-</td>
<td>2010-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td></td>
<td></td>
<td></td>
<td>2009-</td>
</tr>
<tr>
<td>KR</td>
<td>2009-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MY</td>
<td>2010-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TH</td>
<td>2010-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TW</td>
<td>2009-07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>1975-</td>
<td>1975-</td>
<td>1975-</td>
<td>1975-</td>
</tr>
<tr>
<td>VN</td>
<td>2010-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WO</td>
<td>1978-</td>
<td>1978-</td>
<td>1999</td>
<td>1978-</td>
</tr>
</tbody>
</table>

*APTS: Application Number, Thomson Scientific

Starting from 1996 (DW 9626), German utility models are entered in the World Patents Index. A utility model may also appear with its application number as a priority application (with BR, CN, DE, ES, IT, and JP priorities).

Note on text substances at invention level. To improve the accessibility of the content of the patents the database producer formulates a new, enhanced title and an abstract in English. The words of the title can be searched in their basic grammatical form (Title Terms /TT) and are complemented by Additional Words (/AW). The proximity relations of the title words are maintained in the TT field. An online thesaurus is available in the /TT field.

Older titles consist of two parts separated by a dash. The first part names the field of the invention while the second part summarises its novelty. Since 1999 there are newly structured titles and abstracts: The title is no longer
Patent databases on STN International

segmented, but still names both the field of the invention and its novelty. There are three different types of abstracts:

- Basic Online (Alert) Abstract
- Technology Focus (only if sufficiently presented in the document)
- Extension Abstract (CPI file segment in WPIX only)

The Alert Abstract is structured. The sections have these headings:

- **Novelty**: Short description of what makes the invention novel, i.e. in which way it is different from existing technology in a non-trivial way
- **Detailed Description**: Summary of the main claim (and, if applicable, other independent claims) if this would blast the Novelty section
- **Activity**: Description of the biological effect of the claimed invention, particularly with pharmaceutical, veterinary, or agrichemical patents
- **Mechanism of action**: Description of the biological mechanism the invention uses for its effect, particularly with pharmaceutical, veterinary, or agrichemical patents
- **Use**: Always available, list of applications of the invention in its field
- **Advantage**: Summary of the advantages of the invention, from the description by the inventor
- **Description of Drawing(s)**: Short description of possible drawings including references

The individual sections are available depending on the field of the invention and contents of the document. The restructuring of the abstract affects searching as well as quick reading and understanding the patent.

The Technology Focus is to enable end users and engineers to find out quickly if the patent is of interest. The Paragraph Headings used describe the field of an invention from different points of technology in order to present the scientific contents in an easily understandable form:

- **Agriculture**: Pesticides, Herbicides, Fungicides, Fertilizers, etc., excluding their preparation (cf. Organic Chemistry)
- **Biology**: Naturally occurring biological materials
- **Biotechnology**: Genetic engineering, etc.
- **Ceramics and Glass**: Glass, Refractories, Ceramics, Cement, etc.
- **Chemical Engineering**: Industrial processing of chemicals
- **Computing and Control**: Automotive, Environmental, Manufacturing processes, etc.
- **Electrical Power and Energy**: Power generation, Nuclear power, Radioactivity
- **Electronics**: Electronic circuits and devices
- **Environment**: Pollution control, Water and sewage treatment, etc.
- **Food**: Human food, Brewery, Animal food, etc.
- **Imaging and Communication**: Imaging technologies, Inks, Printing, Electrophotography, Recording media, Broadcasting, Telecommunications
- **Industrial Standards**: Used when comparison to industrial standards is made
- **Inorganic Chemistry**: Inorganic materials, except glass and ceramics
- **Instrumentation and Testing**: Chemical analysis, Testing, Medical equipment
- **Mechanical Engineering**: Processing machinery, Mechanical equipment, etc.
- **Metallurgy**: Metal treatment, production, refining, working & finishing, Alloys, Solders, etc.
- **Organic Chemistry**: Preparation of organic chemicals, including pharmaceuticals and agrochemicals, but excluding polymers (cf. Polymers)
12.4 Dynamics

The Derwent World Patents Index database follows the dynamic principle at invention level. Upon arrival of the first document of a patent family at Thomson Scientific, this document is considered as ‘Basic’, and a new record is created in the database. The bibliographical details of later documents of the same patent family (having the same priority data) are added to the existing record as ‘Equivalents’, i.e. the publication data to the PI field, application data to the AI field, classification to the IPC field, a new abstract to the AB (ABEQ) field, etc. In some cases (e.g. division, continuation) a new record is created in the database and a cross reference is made in the CR field.

To record updates to an existing document (patent family) there are a number of Update fields being amended or overwritten (cf. chapter Monitoring patents). There are counter fields for the number of countries (CYC – Country Count) and patent numbers (PNC – Patent Number Count) being updated whenever an Equivalent is added.

In addition available data are added at publication level (original text data, bibliographical details from the original, possibly additional abstract – ABEQ, up to 1997). A separate publication level record is created for each country. These being original data, only re-assigned IPC and US classification data will be updated.

12.5 Updating

New documents are entered into the World Patents Index approx. 15 days up to some months after publication, depending on the subject field and patent office.

12.6 Document from World Patents Index

Display format: MAXG MEMB

Invention level

AN  2006-028530 [200603] WPI INDEX
ED  20060112
DNC C2006-009761 [200603]
TI  Juicer and grater assembly to extract juice from cut citrus fruit and grate skin of citrus fruit, has extractor removably secured on strainer in positions where tab covers aperture to allow extracted juice to flow through another aperture
DC  D14; P28
IN  DE G J H; DE GROOTE J; JAN H D G; DE G J
PA  (REXA-C) DART IND INC; (DGRO-I) DE GROOTE J
CYC 46
    EP 1611823 A2 20060104 (200603) EN
    JP 2006006954 A 20060112 (200605) JA 8
    CA 2508396 A1 20051225 (200609) EN
    NO 2005003043 A 20051227 (200609) NO
    CN 1711943 A 20051228 (200634) ZH
    ZA 2005004506 A 20060426 (200635) EN 16
    AU 2005202485 A1 20060112 (200654) EN
    US 7117784 B2 20061010 (200667) EN
    KR 2006046519 A 20060517 (200673) KD
    IN 2005DE01539 A 20070105 (200725) EN
    JP 4018109 B2 20071205 (200781) JA 7
    PH 1200500311 B1 20080403 (200869) EN
    EP 1611823 B1 20090304 (200917) EN
    DE 602005013028 E 20090416 (200929) DE
    CN 100544642 C 20090930 (201001) ZH
    NO 329537 B1 20101110 (201076) NO
    CA 2508396 C 20120403 (201227) EN
    IN 233976 B 20090522 (201227) EN
AB US 20050284309 A1 UPAB: 20060112

NOVELTY - A juicer and grater assembly comprises an extractor having at least one radially extending tab, and a strainer having at least a first aperture larger than a second aperture. The extractor is removably secured on the strainer in two positions where the tab covers the first or second aperture for allowing extracted juice to flow through the second or first aperture.

DETAILED DESCRIPTION - A juicer and grater assembly comprises an extractor having at least one radially extending tab, and a strainer having at least a first aperture and at least a second aperture. The first aperture is larger than the second aperture. The extractor (12) is removably secured on the strainer in a first position where the tab covers the first aperture for allowing extracted juice to flow through the second aperture and a second position where the tab covers the second aperture allowing juice and pulp to flow through the first aperture.

USE - For extracting juice from cut citrus fruit and grating outer layer or skin of citrus fruit.

ADVANTAGE - The invention provides both juice and juice with pulp when desired and a grater for grating the outer layer or skin of citrus fruit.

DESCRIPTION OF DRAWINGS - The figure shows a top perspective view of the juicer and grater assembly.

Extractor (12)
Strainer (14)
Upper cone portion (18)
The invention provides a juicer and grater assembly comprising an extractor (12) having a plurality of radially extending tabs (30) integral with a lower portion (20) thereof, a combination grater and strainer (14) having at least a plurality of first apertures (60) and a plurality of second apertures (64), wherein the extractor (12) is removably secured on the combination grater and strainer in either a first position wherein the plurality of radially extending tabs cover the plurality of first apertures for allowing extracted juice to flow through the plurality of second apertures, or in a second position wherein the plurality of radially extending tabs cover the plurality of second apertures allowing juice and pulp to flow through the plurality of first apertures.
The invention provides a juicer and grater assembly comprising an extractor having a plurality of radially extending tabs integral with a lower portion thereof, a combination grater and strainer having at least a plurality of first apertures and a plurality of second apertures, wherein the extractor is removably secured on the combination grater and strainer in either a first position wherein the plurality of radially extending tabs cover the plurality of first apertures for allowing extracted juice to flow through the plurality of second apertures, or in a second position wherein the plurality of radially extending tabs cover the plurality of second apertures allowing juice and pulp to flow through the plurality of first apertures.

Claims 1. A juicer and grater assembly, comprising: an extractor having at least one radially extending tab, a strainer having at least a first aperture and at least a second aperture, wherein said extractor is removably secured on said strainer in either a first position wherein said at least one radially extending tab covers said at least a first aperture for allowing extracted juice to flow through said at least a second aperture, or in a second position wherein said at least radially extending tab covers said at least a second aperture allowing juice and pulp to flow through said at least a first aperture.
### 12.7 Selected Fields

#### 12.7.1 Invention level, complete document

<table>
<thead>
<tr>
<th>DWPI</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN, ANX, CR (XR)</td>
<td>AN, ANX, CR (XR)</td>
<td>AN, ANX, CR (XR)</td>
</tr>
<tr>
<td></td>
<td>ED, UP, UPAB, UPEQ, UPGI, UPIC, UPNC, UPEC, UPFT, UPIT, UPP, UPPA, UPPR, UPRR, UPTI, UPS, DUPD</td>
<td>ED, UP, UPAB, UPEQ, UPGI, UPIC, UPNC, UPEC, UPFT, UPIT, UPP, UPPA, UPPR, UPTI, UPS, DUPD</td>
<td>ED, UP, UPAB, UPEQ, UPGI, UPIC, UPNC, UPEC, UPFT, UPIT, UPP, UPPA, UPPR, UPTI, UPS, DUPD</td>
</tr>
<tr>
<td>Contents information</td>
<td>TI, TT, AW, AB, ABDT, ABEX, ACTN, ACTV, ADV, DETD, DRWD, NOV, TECH, UADV, USE</td>
<td>TI, TT, AW, AB, ABDT, ABEX, ABEX*, ACTN, ACTV, ADV, ALE, DETD, DRWD, NOV, TECH, UADV, USE</td>
<td>TI, TT, AW, AB, ABDT, ABEX, ACTN, ACTV, ADV, ALE, NOV, TECH, UADV, USE</td>
</tr>
<tr>
<td></td>
<td>BI, TI, TT, AB, ABDT, ABEX, ACTN, ACTV, ADV, DETD, DRWD, NOV, TECH, UADV, USE</td>
<td>BI, TI, TT, AB, ABDT, ABEX, ACTN, ACTV, ADV, DETD, DRWD, NOV, TECH, UADV, USE</td>
<td>BI, TI, TT, AB, ABDT, ABEX, ACTN, ACTV, ADV, DETD, DRWD, NOV, TECH, UADV, USE</td>
</tr>
<tr>
<td>Numeric properties</td>
<td>PHP***</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Indexing</td>
<td>KW, MC**</td>
<td>KW, MC</td>
<td>KW, MC</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.ACD, IPC.REF, IPC.VER</td>
<td>IPC8: IPC, IPC1, IPC.ACD, IPC.REF, IPC.VER</td>
<td>IPC8: IPC, IPC.A, IPC.AI, IPC.C, IPC.CI, IPC.F, IPC.REF, IPC1, IPC.C, IPC.AI, IPC.C, IPC.CI, IPC.F, IPC.REF</td>
</tr>
<tr>
<td></td>
<td>IPC1-7: IC, MGR, SGR, ICM, ICM.B, ICS, ICA, ICI</td>
<td>IPC1-7: IC, ICM, ICM.B, ICS, ICA, ICI</td>
<td>IPC1-7: IC, SGR, SGL, ICM, ICM.B, SCGM, SCLM, ICS, SCGS, SCLS, ICA, SCGA, SCLA, ICI</td>
</tr>
<tr>
<td></td>
<td>CPC: CPC, CPC.ACD, CPC.KW, CPC.VER, NCL, NCLM, NCLS, EPC (ECLA, EPCLA), EPC.KW</td>
<td>CPC: CPC, CPC.ACD, CPC.KW, CPC.VER, NCL, NCLM, NCLS, EPC (ECLA, EPCLA), EPC.KW</td>
<td>CPC: CPC, CPC.ACD, CPC.KW, CPC.VER, NCL, NCLM, NCLS, EPC (ECLA, EPCLA), EPC.KW</td>
</tr>
<tr>
<td></td>
<td>ICO, FCL (PC), FCL (IP), FCL (JPC), FICL, FACL, FTCM (FTERM, FTCLA, JPCLA), DC, MC</td>
<td>FTCM (FTERM, FTCLA, JPCLA), DC, MC</td>
<td>FTCM (FTERM, FTCLA, JPCLA), DC, MC</td>
</tr>
<tr>
<td>Inventor</td>
<td>AU, IN</td>
<td>AU, IN</td>
<td>AU, IN</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>CS, PA, PACO</td>
<td>CS, PA, PATS</td>
<td>CS, PA, PACO, PATS, PAX</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRDF, PRY, PRYF, PRN, PRN.YR</td>
<td>PRAI, PRN</td>
<td>PRAI, APPS, PRC, PRD, PRDF, PRY, PRYF, PRN</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AY, AP, AP.YR, APT, DS, PCS</td>
<td>AI, AI.B, ADT, AP, DS</td>
<td>AI, ADT, APPS, AC, AD, AY, AP, AP.YR, APT, DS, PCS</td>
</tr>
<tr>
<td>Family data</td>
<td>FDT, FDT.PC (RLPC), FDT.PN (RLPN), FDT.PK (RLPK), FDT.TP, FDT, PATS</td>
<td>FDT, PATS</td>
<td>FDT, FDT.PC (RLPC), FDT.PN (RLPN), FDT.PK (RLPK), FDT.TP, PATS</td>
</tr>
<tr>
<td>Other</td>
<td>LA, SL, DLVL, DRWN, DT, FA, FAS, FS, PGN</td>
<td>LA, DLVL, DRWN, FA, FAS, FS, GI, GINF, GIS</td>
<td>LA, DLVL, DRWN, FA, FAS, FS, GIS</td>
</tr>
</tbody>
</table>

* accessible only for Derwent Subscribers in WPX
** MC are not searchable in the CPI file segment in WPINDEX
*** Numeric properties: **E**, **A**, **PHP** lists properties available for numeric search (cf. database description). The search is performed in all fields containing English text. There are no specific display fields, but the numeric values will be highlighted. For more information enter HELP NPS.

For other fields on Derwent Chemical Resource (DCR) and Derwent Chemical and Polymer Indexing see Database Summary Sheets.
## 12.7.2 Additional fields at publication level

These fields are used for individual publications:

<table>
<thead>
<tr>
<th>DWPI</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and</td>
<td>UPAA, UPAT, UPCL,</td>
<td>UPAA, UPAT, UPCL,</td>
<td>UPAA, UPAT, UPCL, UPIO, UPNO</td>
</tr>
<tr>
<td>update codes</td>
<td>UPIO, UPNO</td>
<td>UPIO, UPNO</td>
<td></td>
</tr>
<tr>
<td>Contents information</td>
<td>BIEX, TIDE, TIEN, TIES, TIFR</td>
<td>TIDE, TIEN, TIES, TIFR</td>
<td>TIDE, TIEN, TIES, TIFR ABD, ABEN, ABFR, MCLM (CLM), CLMEN, CLMDE, CLMFPR CLMN</td>
</tr>
<tr>
<td></td>
<td>CLMN</td>
<td>CLMN</td>
<td></td>
</tr>
<tr>
<td>Patent classification</td>
<td>IIC, IICA, IICM, IICS INCL, INCLM, INCLS, IPC.ACD</td>
<td>IIC, IICA, IICM, IICS INCL, INCLM, INCLS IPC.ACD, ISCG, ISCGA, ISCGM, ISCGS, ISCL, ISCLM, ISCLS, ISCLA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td>INA, INA.CNY, INA.CTY, INO, IN.T</td>
<td>INA, INO, IN.T</td>
<td>INA, INA.CNY, INA.CTY, INO, IN.T</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA.LIM, PA.NAT, PA.RES, PA.T, PAA, PAA.CNY, PAA.CTY, PAO</td>
<td>PAA, PAO, PA.T</td>
<td>PAA, PAA.CNY, PAA.CTY, PAO, PA.T</td>
</tr>
<tr>
<td>Agent</td>
<td>AG, AGA.T, AGA.AGA.CNY, AGA.CTY</td>
<td>AG, AGA, AGA.T</td>
<td>CS, PA, PACO, AGA.T</td>
</tr>
<tr>
<td>Application data</td>
<td>APTS</td>
<td>APTS</td>
<td>APTS</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC.B, PRD.B, PRN.B, PRY.B PRTS</td>
<td>PRTS</td>
<td>PRAI, APPS PRC, PRD, PRDF, PRY, PRYF PRN, PRTS</td>
</tr>
<tr>
<td>Other</td>
<td>SL.M, FS.M, FA.M</td>
<td>SL.M, FS.M, FA.M</td>
<td>SL.M, FS.M, FA.M</td>
</tr>
</tbody>
</table>

## 12.7.3 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>Document Number</td>
<td>DN</td>
<td>DNC, DNN</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, DS</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, FDT, RPN</td>
</tr>
</tbody>
</table>
13 ENCOMPPAT/ENCOMPPAT2

13.1 Typical queries

- Searches on the state of the art / information searches (text and classification) in the fields of petroleum, natural gas, and energy, e.g.:
  - What is the state of the art concerning the purification of water polluted by phenols and petroleum products?

- Name searches (inventor, patent assignee), e.g.:
  - What are the latest patents of Shell Oil Corp.?

- Searches for formal data (numbers: publication numbers, application numbers), e.g.:
  - What is the content of patent numbered RU 2099290?

13.2 Brief description

Producer: Elsevier Engineering Information, Inc., USA
Period covered: Since 1964
Size: More than 684,000 patent publications (August 2014)
Updated: Weekly
Language: English

13.3 Contents

- Excerpts from patent publications in the fields of petroleum and energy, including all aspects of processing, chemicals and environment, health and safety

- Up to 1982 limited country coverage (BE, CA, FR, GB, JP, NL, US, ZA); after that date, virtually all industrialized countries (including EPO and WIPO)

- Bibliographic data, priority and publication data, but no application data

- International patent classification IPC1–8, IPC7 or IPC8 format, no attributes, no re-classification of the back-file

- Family information (FI), if further members of the family were already available at the date of entry in the database

- Information on chemical compounds, etc., is available as Controlled Terms (CT, CTA), Supplementary Terms (ST) and Linked Terms (LT)

- Numeric values of more than 55 physical and chemical properties in approx. 1,800 units (Version 2)

The database ENCOMPPAT/ENCOMPPAT2 is based on the Derwent services European Patent Report and Chemical Patents Index and on Chemical Abstracts, in addition further GB and US patents are used. The abstract is taken from the Derwent services.

There are access restrictions for the database: ENCOMPPAT is only accessible to API supporting organizations, ENCOMPPAT2 only to users from countries in which a supporting organization has its headquarters; furthermore, there is a time limit of two hours per year per organization of combined usage with ENCOMPPAT2 on all vendors (see the database description). Also, abstracts cannot be displayed in ENCOMPPAT2. (However, the Basic Index contains all words of the abstracts. The abstracts can be displayed in the World Patents Index.)
13.4 Document from ENCOMPPAT(2)

Display format: ALL

AN 2006:9418 ENCOMPPAT; ENCOMPPAT2
DN P200610588
TI Diesel engine detects oxygen concentration in exhaust gas downstream side and determines catalyst purification capability of diesel smoke purification unit, based on which execution of filter reproduction processing is prohibited
IN MORINAGA S; NAKAI E; SAHARA M
PA MAZDA MOTOR CORP; MAZDA KK
PI JP 2006097641 20060413
AI JP 2004-286952 20040930
PRAI JP 2004-286952 20040930
FI JP 2006097641 20060413
OS DERWENT 2006259577
IC B01D0053-94; F01N0003-02; F01N0003-18; F01N0003-24; F02D0041-02; F02D0041-04; F02D0041-38; F02D0045-00
CC AIR POLLUTION CONTROL; ENVIRONMENT, TRANSPORT & STORAGE; HEALTH & ENVIRONMENT
CT AIR POLLUTANT; *AUTOMOTIVE EMISSION CONTROL EQUIP; AUTOMOTIVE ENGINE; AUTOMOTIVE EXHAUST GAS; CATALYST; COMPOSITION; COMPOUNDS; COMPRESSION IGNITION ENGINE; *DETECTOR; DIESEL ENGINE; ELEMENT; ENGINE; EXHAUST GAS; FILTER; *FUEL CONSUMPTION; *FUEL CONSUMPTION REDUCTION; GROUP VIA; HYDROCARBON; *INSTRUMENT; INTERNAL COMBUSTION ENGINE; *MONITORING; OXYGEN; OXYGEN CONTENT; *OXYGEN SENSOR; PARTICULATES; POLLUTANT; *POLLUTION CONTROL; POLLUTION CONTROL EQUIPMENT; PREVENTION; SEPARATION EQUIPMENT; SMOKE; SUBSTANCE DETERMINED; UNBURNED HYDROCARBON; WASTE GAS; WASTE MATERIAL
LT ELEMENT; GROUP VIA; OXYGEN; SUBSTANCE DETERMINED
LT AIR POLLUTANT; PARTICULATES; POLLUTANT; WASTE MATERIAL
LT AIR POLLUTANT; COMPOUNDS; HYDROCARBON; POLLUTANT; UNBURNED HYDROCARBON; WASTE MATERIAL
ATM Template not available

13.5 Selected Fields

<table>
<thead>
<tr>
<th>ENCOMPPAT(2)</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>DN ED, UP</td>
<td>AN, DN</td>
<td>AN, DN</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, TI, AB</td>
<td>TI, AB</td>
<td>TI, AB</td>
</tr>
<tr>
<td>Numeric properties</td>
<td>PHP*</td>
<td>* PHP*</td>
<td>*</td>
</tr>
<tr>
<td>Indexing</td>
<td>CT, CW, CTA LT, LTM, ST, RN, TD</td>
<td>CT, CTA LT, LTM, ST, RN, TD</td>
<td>CT, CTA LT, ST, RN</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC, CC</td>
<td>IPC, CC</td>
<td>CC, IPC</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU)</td>
<td>IN (AU)</td>
<td>IN (AU)</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>CS, PA, AU</td>
<td>CS, PA, AU</td>
<td>CS, PA, AU</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRN, PRY, APPS PRAI, PRN, APPS</td>
<td>PRAI, PRC, PRD, PRN, PRY, APPS</td>
<td></td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AP, AY, APPS DS, PCS</td>
<td>AI, AP, APPS DS</td>
<td>AC, AD, AI, AN, AP, AY, APPS, DS, PCS</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PY, PN, PCS</td>
<td>PI, PN, PATS</td>
<td>PI, PC, PD, PN, PATS, PCS</td>
</tr>
<tr>
<td>Family data</td>
<td>FC, FD, FN, FY</td>
<td>FI, FN, PATS</td>
<td>FI, FC, FD, FN, PATS, PCS</td>
</tr>
<tr>
<td>Sources</td>
<td>OS</td>
<td>OS</td>
<td>OS</td>
</tr>
<tr>
<td>Other</td>
<td>DT, LA, ATM, FA</td>
<td>ATM</td>
<td>ATM, CIT</td>
</tr>
</tbody>
</table>

* Numeric properties: E A/PHP lists properties available for numeric search (cf. database description). The search is performed in all fields containing English text. There are no specific display fields, but the hit numeric values will be highlighted. For more information enter HELP NPS.
### 13.5.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>International Patent Classification</td>
<td>IPC</td>
<td>IC</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, DS, FC</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, FN</td>
</tr>
</tbody>
</table>
Patent databases on STN International

14 EPFULL

14.1 Typical queries

- Searches for the state of the art in EP publications (text and classification), e.g.:
  - What European inventions are there on Locating land mines using geo-radar?
- Name searches (inventor, applicant, agent), e.g.:
  - What inventions of Rossignol have been published by the European Patent Office during the past year?
  - What European patent applications are there of Mr Davin Beckham?
- Searches using formal data (e.g. numbers), e.g.:
  - Has a European Patent been granted to the application numbered EP 1 036 800?
  - What European Patents of ERICSSON were published in 2013?
- Full-text display of European Patents:
  - What are the claims of the European Patent, 0 833 511?
- Legal status display:
  - Which European countries is the patent, EP 1 300 225, valid in?
- SDI searches for European Patents
- Using the full-text to find material for an opposition
- Multi-file searches in combination with other national or regional patent databases

14.2 Brief description

Producer: European Patent Office, Austria; FIZ Karlsruhe, Germany
Period covered: Since 1978
Size: More than 3.8 million records (full text)
      more than 543,000 patent images (August 2014)
Updated: Weekly
Languages: English, French, German

14.3 Contents

- European Patents (EP-B1): full-text published by the European Patent Office in one of the three official languages (English, French, German) since 1980, claims are published in all three official languages
- All texts of the patent applications from 1980 to 1990 and of granted patents from 1978 to 1986 are created by Optical Character Recognition (OCR) software. This means that there may be errors and incomplete text. Some of the documents do not have text because the scanning failed.
- Bibliographical details and original abstract since 1978
- Bibliographical details of Euro-PCT applications filed in one of the official languages; no separate EP document is published of such applications. The full text can be found in PCTFULL.
- Title in all three official languages
Guide to STN Patent Databases

- International Patent Classification IPC1–8, IPC thesaurus, range search possible, currently no re-classification of the back-file
- Abstracts are added to new documents within a few weeks (from 1990)
- Details on examiner citations, XP reference numbers are given for non-patent literature cited in European search and examination reports
- Details on inventor citations (patents and non-patent literature), since 2006
- Related documents
- Images (front pages), since 2006
- Legal status information from INPADOCDB (only for display with LS, LS2, FAM and CFAM) and from the EP-Bulletin (also searchable)

14.4 Dynamics

The EPFULL database follows a mixed principle using segmentation. All publications of the same patent application form one documentation unit. Each document is entered into a separate record and will not be updated. The legal status is updated.

14.5 Updating

EP documents are entered in the database 1 day after the EPO publication date; with WO documents there is usually a delay.

14.6 Document from EPFULL

Display format: MAXG (includes LSEP.M)

This document consists of (1) the publication of the European patent application with search report, (2) the publication of the European Patent, and (3) the legal status information.

(1) European patent application with search report

AN  2007:81309  EPFULL  EDP 20080409  ED 20080409  UP 20080725
DUPD 20080723  DUPW 200830
TIE N Rolling mill and method for flexible cold or hot one-way or reverse rolling of a metal strip.
TIFR Laminon et procédé de laminage flexible a froid ou a chaud a voie unique ou inverse d'une bande de metal.
TIDE Walzwerk und Verfahren zum flexiblen Kalt- oder Warm-Einweg- oder Reversierwalzen von Metallband.
IN Barten, Axel, Dipl.-Ing. (ETH), Im Gensterfeld 20, 57078 Siegen, DE; Neukant, Rainer, Dipl.-Ing., Zitzenbachstrasse 43a, 57223 Kreuztal, DE; Stahl, Werner, Ing., Zum Hohlen Stein 20, 57223 Kreuztal, DE
PA ACHENBACH BUSCHHUeTTEN GmbH, Siegener Strasse 152, 57223 Kreuztal, DE
PAN 1433270
AG Puerckhauer, Rolf, Am Rosenwald 25, 57234 Wilnsdorf, DE
AGN 383111
DT Patent
LAF German
LA German
LAP German
TL German; English; French
PIT EP Application published with search report
PI EP 1908534  AI 20080409
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR
EXTENSION STATES: AL BA HR MK RS
AI EP 2007-18882  A 20070926
PRAI DE 2006-102006047463 A 20061007
IPCI B21B0037-26 [I,A]; B21B0037-54 [I,A]
ABEN
Rolling mill for flexible cold or hot rolling a metal strip comprises drives for controlling revolutions of uncoiling and coiling units with superimposed controlling of electrical conductance.

Rolling mill (1) comprises drives for controlling revolutions of uncoiling and coiling units (7, 8) with superimposed controlling of electrical conductance for compensating for and regulating of mass flow changes of the rolling strip (9) and the strip pulling speed and for regulating the strip traction, especially in the region of the deviating points of the strip acceleration during change of the strip thickness profile. An independent claim is also included for a method for flexible cold or hot rolling a metal strip.

**Gegenstand der Erfindung**

Gegenstand der Erfindung sind ein Walzwerk und ein Verfahren zum flexiblen Walzen von Bandmaterial (9), die die beim Walzen auftretenden Massenflussstörungen und Bandzugänderungen durch eine leistungsfaehige Antriebsregelung der Haspelantriebe mit überlagert kontrolliert derart kompensieren, dass die Haspelzüge auch im Bereich der Umkehrpunkte der Bandbeschleunigung bei einer Änderung des Banddickenprofils konstant bleiben. Bei einer weiteren Ausführungsform des Walzwerks wird dieses mit einem 5-Rollenpaar (13,14) als Bandspeicher kombiniert, das jeweils ein- und/oder auslaufseitig des Walzgerüsts (1) angeordnet ist, wodurch Restfehler im Massenfluss und im Bandzug aufgrund einer limitierten Antriebsdynamik der Haspelantriebe kompensiert werden.

**Fig. 2**

**DE**

[0001] Die Erfindung betrifft eine Flachdichtung mit mindestens einer metallischen Lage, in der jeweils mindestens eine Durchgangsoffnung ausgebildet ist und ein Verfahren zu ihrer Herstellung. Die ein- oder auch...

**REPA**

EP 1121990 A2 [APP] (0003)
DE 10133756 A1 [APP] (0004)
DE 10310399 A1 [APP] (0005)
EP 1464415 A2 [APP] (0006)
DE 102004041321 A1 [APP] (0007)
DE 102544178 A1 [APP] (0008)

**DE**


...

17. Verfahren zum flexiblen Kalt- oder Warm-Einweg- oder Reversierwalzen von Metallband mit veränderlicher Banddicke in einem Walzwerk, das einen Walzensatz und ein Anstellsystem zur Einstellung des Walzspaltes, eine dem Walzgeruest vorgeordnete Abhaspel und eine dem Walzgeruest nachgeordnete Aufhaspel fuer das Walzband aufweist, die mit einem drehzahlgergelten Antrieb ausgeruestet sind, dadurch gekennzeichnet, dass die Massenflussaenderungen des Walzbandes und die von diesen abhaengige

(2) European Patent

AN 2007:81309 EPPFULL EDP 20080409 ED 20081029 UP 20090902
DUPD 20090902 DUPW 200936
TIEN Rolling mill and method for flexible cold or hot one-way or reverse rolling of a metal strip.
TIFR Laminoir et procede de laminage flexible a froid ou a chaud a voie unique ou inverse d'une bande de metal.
TIDE Walzwerk und Verfahren zum flexiblen Kalt- oder Warm-Einweg- oder Reversierwalzen von Metallband.
IN Barten, Axel, Dipl.-Ing. (ETH), Im Gensterfeld 20, 57078 Siegen, DE; Neukant, Rainer, Dipl.-Ing., Zitzenbachstrasse 43a, 57223 Kreuztal, DE; Stahl, Werner, Ing., Zum Hohlen Stein 20, 57223 Kreuztal, DE
PA ACHENBACH BUSCHHUeTTEN GmbH, Siegener Strasse 152, 57223 Kreuztal, DE
PAN 1433270
AG advotec., Patent- und Rechtsanwaeltle Am Rosenwald 25, 57234 Siegen-Wilsdorf, DE
AGN 118201
DT Patent
LAF German
LA German
LAP German
TL German; English; French
PIT EPB1 Granted patent
PI EP 1908534 B1 20081029
DS DE FR GB IT
AI EP 2007-18882 A 20070926
PRAI DE 2006-1020060407463 A 20061007
REP EP 1121990 A (I-NID56)
EP 1464415 A (I-NID56)
DE 10310399 A1 (I-NID56)
DE 102004041321 A1 (I-NID56)
IPCI B21B0037-26 [I,A]; B21B0037-54 [I,A]
--------------------------------------------------------------------
OP 01 20090512 Admissible opposition
Muhr und Bender KG, In den Schlachtwiesen 4, 57439 Attendorn, DE 128420
Opponent Representative: Neumann, Ernst Dieter et al., Neumann Mueller Oberwalleney & Partner Patentanwaeltle Overstolzenstrasse 2a, 50677 Koeln, DE 52431
--------------------------------------------------------------------
02 20090716 Admissible opposition
Siemens Aktiengesellschaft, Wittelsbacherplatz 2, 80333 Muenchen, DE 217240
--------------------------------------------------------------------
03 20090729 Opposition filed
Patent databases on STN International

SMS Siemag Aktiengesellschaft, Eduard-Schloemann-Strasse 4, 40237 Dusseldorf, DE
224060
Opponent Representative:
Klueppel, Walter et al., Hemmerich & Kollegen Patentanwaelte
Hammerstrasse 2, 57072 Siegen, DE
9229291

PATENT APPLICATIONS

REPA
EP 1121990 A2 (APP) [0003]
DE 10133756 A1 (APP) [0004]
DE 10310399 A1 (APP) [0005]
EP 1464415 A2 (APP) [0006]
DE 102004041321 A1 (APP) [0007]
DE 10254178 A1 (APP) [0008]

DETDDE

CLMEN
1. Rolling mill for flexible cold or hot, one-way or reverse rolling of metal strip (9), in particular made of steel, with changeable strip width, having a roll stand (1) which has a set of rolls (2, 3, 4, 5) and an adjustment system for adjustment of the roll gap, an uncoiler (7) which is disposed in front of the roll stand (1) and a coiler (8) which is disposed after the roll stand...

CLMFR
1. Laminoir pour le laminage flexible a froid ou a chaud, a voie unique ou reversible, de bande (9) de metal, notamment d'acier, ayant une epaisseur de bande variable, comprenant une cage (1) de laminoir, qui a un jeu (2, 3, 4, 5) de cylindres et un systeme de serrage pour le reglage de l'emprise, une debobineuse (7) en amont de la cage (1) de laminoir et une bobineuse...

CLMDE
1. Walzwerk zum flexiblen Kalt- oder Warm-Einweg- oder Reversierwalzen von Metallband (9), insbesondere aus Stahl, mit veränderlicher Banddicke, mit einem Walzgerüst (1), dass einen Walzensatz (2,3,4,5) und ein Anstell System zur Einstellung des Walzspaltes aufweist, einer dem Walzgerüst (1) vorgeordneten Abhaspel (7) und einer dem Walzgerüst (1) nachgeordneten Aufhaspel (8) für das Metallband (9), die mit einem drehzahlgeregelten...

(3) Legal status

LEGAL STATUS INCLUDING HISTORY
AN 2007:81309 EPFULL
20080409 EPB241 Request for examination 20071011
20080409 EB430 Unexamined document without grant, (first publication) 20080409
20080409 EB440 Designated contracting states AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR EP 1908534 A1 20080409
20080409 EPB744EP Extension of the European patent to AL BA HR MK RS 20080409
20080723 EPB452EP Intention to grant 20080701
<table>
<thead>
<tr>
<th>Date</th>
<th>Code</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20081029</td>
<td>EPB450</td>
<td>Document with grant, second</td>
<td>Document with grant, second publication</td>
</tr>
<tr>
<td></td>
<td></td>
<td>publication</td>
<td></td>
</tr>
<tr>
<td>20081029</td>
<td>EPB840</td>
<td>Designated contracting states</td>
<td>Designated contracting states</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DE FR GB IT</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EP 1908534</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B1 20081029</td>
<td></td>
</tr>
<tr>
<td>20081029</td>
<td>EPB880</td>
<td>Publication of search report</td>
<td>Publication of search report (A3 publication)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(A3 publication)</td>
<td></td>
</tr>
<tr>
<td>20081217</td>
<td>EPB840N</td>
<td>Payment of designation fees</td>
<td>Payment of designation fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DE FR GB IT</td>
<td></td>
</tr>
<tr>
<td>20081217</td>
<td>EPB844EPN</td>
<td>Payment of extension fees</td>
<td>Payment of extension fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20090617</td>
<td>EPB780</td>
<td>Opposition</td>
<td>Opposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>01 20090512</td>
<td>Opposition filed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Muhr und Bender KG</td>
<td></td>
</tr>
<tr>
<td>20090826</td>
<td>EPB780</td>
<td>Opposition</td>
<td>Opposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>01 20090512</td>
<td>Admissible opposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Muhr und Bender KG</td>
<td></td>
</tr>
<tr>
<td>20090826</td>
<td>EPB780</td>
<td>Opposition</td>
<td>Opposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>02 20090716</td>
<td>Admissible opposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Siemens Aktiengesellschaft</td>
<td></td>
</tr>
<tr>
<td>20090902</td>
<td>EPB740R</td>
<td>Agent reassignement</td>
<td>Agent reassignement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OLD: Puerckhauer, Rolf, Am</td>
<td>OLD: Puerckhauer, Rolf, Am Rosenwald 25, 57234 Wilnsdorf, DE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rosenwald 25, 57234 Wilnsdorf,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NEW: advotec., Patent- und</td>
<td>NEW: advotec., Patent- und Rechtsanwälte Am Rosenwald 25, 57234 Siegen-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rechtsanwälte</td>
<td>Wilnsdorf, DE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20090902</td>
<td>EPB780</td>
<td>Opposition</td>
<td>Opposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>01 20090512</td>
<td>Admissible opposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Muhr und Bender KG</td>
<td></td>
</tr>
<tr>
<td>20090902</td>
<td>EPB780</td>
<td>Opposition</td>
<td>Opposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>02 20090716</td>
<td>Admissible opposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Siemens Aktiengesellschaft</td>
<td></td>
</tr>
<tr>
<td>20090902</td>
<td>EPB780</td>
<td>Opposition</td>
<td>Opposition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>03 20090729</td>
<td>Opposition filed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMS Siemens Aktiengesellschaft</td>
<td></td>
</tr>
</tbody>
</table>

**Display format:** LS (contains legal status from INPADOCDB)
Patent databases on STN International

EXA Examination, Search Report

<table>
<thead>
<tr>
<th>Patent number</th>
<th>Accession number</th>
<th>Update code</th>
<th>Last update</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>20081029 EPB1</td>
<td>PUB</td>
<td></td>
<td>20080410</td>
<td>Patent Specification (B1) 20081029</td>
</tr>
<tr>
<td>20081029 EPAK</td>
<td>+ DESIGNATED CONTRACTING STATES: EP B1 DE FR GB IT</td>
<td></td>
<td>20081030</td>
<td></td>
</tr>
<tr>
<td>20081029 EPRG</td>
<td>GBFG4D</td>
<td></td>
<td>20081030</td>
<td>Reference to a National Code</td>
</tr>
<tr>
<td>20081211 EPREF</td>
<td>CORRESPONDS TO:</td>
<td></td>
<td>20081107</td>
<td>DE 502007000207 P 20081211</td>
</tr>
<tr>
<td>20081217 EPAKX</td>
<td>+ PAYMENT OF DESIGNATION FEES DE FR GB IT</td>
<td></td>
<td>20081218</td>
<td></td>
</tr>
<tr>
<td>20090617 EP26</td>
<td>- OPPOSITION FILED MUHR UND BENDER KG</td>
<td></td>
<td>20090912</td>
<td>ORE Opposition, Reexamination</td>
</tr>
<tr>
<td>20090826 EP26</td>
<td>- OPPOSITION FILED SIEMENS AKTIENGESELLSCHAFT</td>
<td></td>
<td>20090916</td>
<td>ORE Opposition, Reexamination</td>
</tr>
<tr>
<td>20090902 EP26</td>
<td>- OPPOSITION FILED SMS SIEMAG AKTIENGESELLSCHAFT</td>
<td></td>
<td>20090929</td>
<td>ORE Opposition, Reexamination</td>
</tr>
<tr>
<td>20101130 EPPGFP</td>
<td>+ POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE</td>
<td></td>
<td>20101123</td>
<td>Payment Year: 04</td>
</tr>
<tr>
<td>20110228 EPPGFP</td>
<td>+ POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE</td>
<td></td>
<td>20110120</td>
<td>Payment Year: 04</td>
</tr>
</tbody>
</table>

14.7 Selected Fields

<table>
<thead>
<tr>
<th>Accession number and update codes</th>
<th>AN, ED, UP, DUPD, DUPW (UW), DUPW (UW), DUPW (UW) (UW)</th>
<th>AN, LSEP, AN, ED, UP, DUPD, DUPW (UW), DUPW (UW), DUPW (UW)</th>
<th>AN, ED, UP, DUPD, DUPW (UW), DUPW (UW), DUPW (UW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents information</td>
<td>BI, SBI (AB, MCLM, TI)</td>
<td>TI, TIDE, TIEN, TIFR, AB, ABEN, ABDE, ABFR</td>
<td>TI, TIDE, TIEN, TIFR, AB, ABEN, ABDE, ABFR</td>
</tr>
<tr>
<td></td>
<td>TI, AB</td>
<td>CLM, CLMEN, CLMDE, CLMFR</td>
<td>CLM, CLMEN, CLMDE, CLMFR</td>
</tr>
<tr>
<td></td>
<td>MCLM</td>
<td>MCLM, MCLMDE, MCLMFR, MCLMEN, MCLMFR, DETD, DETDEN, DETDDE, DETDFR</td>
<td>MCLM, MCLMDE, MCLMEN, MCLMFR, MCLMEN, MCLMFR, DETD, DETDEN, DETDDE, DETDFR</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU), IN (AU), IN.CNY, IN.COM, IN.CTY, IN.CNY</td>
<td>IN (AU), IN (AU), IN.COM, IN.CNY</td>
<td>IN (AU), IN.COM, IN.CNY</td>
</tr>
</tbody>
</table>
# Guide to STN Patent Databases

## EPFULL

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent</td>
<td>AG, AG.CNY, AG.CTY, AG.STR, AGA, AGN</td>
<td>AG, AG.CNY, AG.CTY, AG.STR, AGA, AGN</td>
<td>AG, AG.CNY, AG.CTY, AG.STR, AGA, AGN</td>
<td>AG, AG.CNY, AG.CTY, AG.STR, AGA, AGN</td>
<td>AG, AG.CNY, AG.CTY, AG.STR, AGA, AGN</td>
<td>AG, AG.CNY, AG.CTY, AG.STR, AGA, AGN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AY, AP, APPS, PCS</td>
<td>AI, AI.M</td>
<td>AI, AC, AD, AY, AP, APPS, PCS</td>
<td>AI, AC, AD, AY, AP, APPS, PCS</td>
<td>AI, AC, AD, AY, AP, APPS, PCS</td>
<td>AI, AC, AD, AY, AP, APPS, PCS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PY, PN</td>
<td>PI, PIT, PATS</td>
<td>PI, PC, PD, PY, PN, PK, PIT, PATS</td>
<td>PI, PC, PD, PY, PN, PK, PIT, PATS</td>
<td>PI, PC, PD, PY, PN, PK, PIT, PATS</td>
<td>PI, PC, PD, PY, PN, PK, PIT, PATS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Related documents</td>
<td>RLN, RLC, RLD, RLT APPS</td>
<td>RLI APPS</td>
<td>RLI APPS</td>
<td>RLI APPS</td>
<td>RLI APPS</td>
<td>RLI APPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citations</td>
<td>REN</td>
<td>REP, PATS</td>
<td>REN, REN, REP, PATS</td>
<td>REN, REN, REP, PATS</td>
<td>REN, REN, REP, PATS</td>
<td>REN, REN, REP, PATS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal status</td>
<td>LSC, LSD, LSDF, LSCY, LSPY, LSTX, ICO, INAO, PAO, ADAO, TIO, EWLS</td>
<td>LS, LS2, FAM, CFAM, LSEP</td>
<td>LS, LS2, LSEP, LS.WD, LSC, LSCY, LSD, LSDF</td>
<td>LS, LS2, LSEP, LS.WD, LSC, LSCY, LSD, LSDF</td>
<td>LS, LS2, LSEP, LS.WD, LSC, LSCY, LSD, LSDF</td>
<td>LS, LS2, LSEP, LS.WD, LSC, LSCY, LSD, LSDF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* For DISPLAY and SELECT of many fields the desired publication level can be specified:
  .M → all publication levels in all languages are included
  .PK → certain publication levels in all languages are included

## 14.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, DS</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN</td>
</tr>
<tr>
<td>Short Basic Index</td>
<td>SBI</td>
<td>AB, MCLM, TI</td>
</tr>
</tbody>
</table>
15 FRANCEPAT

15.1 Typical queries

- Searches for the state of the art in France (text and classification), e.g.:
  - What inventions were applied in France on Tissu pour sacs gonflables (Fabrics for Air Bags)?
- Name searches (inventor, applicant), e.g.:
  - What inventions of L’Oreal were published in France during the past year?
  - What patent applications are there in France of Mr Henri Arnaud?
  - Has the company Playbois taken any licences?
- Searches using formal data (numbers: publication number, application number), e.g.:
  - What is contained in the patent numbered FR 2 843 860?
  - Who is the owner of the utility model numbered FR 2 843 796 U?
- Legal status display:
  - Is the patent numbered FR 2 550 146 still in force?
  - What patents has Playbois licensed?
  - Have any licence agreements been made on patents of Thomson CSF?
  - Is there a Complementary Protection Certificate on the patent numbered FR 2 537 395 of Rhone Poulenc Agrochimie?
  - What is the term of the Complementary Protection Certificate on the substance Rivastigmine (patent of Sandoz)?

15.2 Brief description

Producer: Institut National de la Propriété Industrielle (INPI), France
Size: Approx. 1.05 million records on patents, approx. 85,700 records on utility models, approx. 476,000 patent drawings (June 2011)
Updated: Database closed – last update 2009-11
Languages: French (Controlled Terms in English)

15.3 Contents

- Excerpts from French patent applications, granted patents and utility models from all fields relevant to patents
- Complementary Protection Certificates (from 1969), searchable
- Bibliographical details, title, names (inventor, applicant, agent)
- International Patent Classification IPC1–8, IPC thesaurus, range search possible, currently no re-classification of the back-file
- Abstracts and controlled terms from 1978, controlled terms in English from 1987
- Patent drawing (from 1978)
15.4 Dynamics
The FRANCEPAT database follows the dynamic principle, i.e., in case of a new publication or a legal status change the existing record is altered.

15.5 Updating
No updates since November 2009.

15.6 Document from FRANCEPAT
Display format: MAXG

AN 1096077 FRANCEPAT ED 20070803 UP 20070803
TI SEMOIR COMPORTANT UNE SERIE DE BRAS, PORTEURS DE DISQUES SEMEURS ET DE ROULEAUX SUIVEURS, SUPPORTES SOUS LE CHASSIS PAR L'INTERMEDIAIRE D'ARTICULATIONS ELASTIQUES
IN CLOCHARD DANIEL
LA VIALERIE 35113 DOMAGNE (FR)
FR-35113
PA Applicant: SULKY-BUREL (Societe par actions simplifiee)
RUE FABRIP BUREL BP 921110 35220 CHATEAUBOURG (FR)
FR-35220
PAN 333622140
AG REGIMBEAU
PIT Patent
PI FR 2896659 A1 20070803 200731 Application, first publ.
AI FR 2006-756 20060127
PRAI FR 2006-756 20060127 *
PRAO FR0600756 *
NSR BOPI Search Report 200731 20070803
REP Examiner citations:
Patent Number Kind Relevance Indicator
FR 2855714 A1 A,D
EP 1391147 A1 A
WO 8505246 A1 A
Applicant citations:
Patent Number Kind
GB 1218785 A
GB 2040656 A
IC IPCI A01C0005-06 [1,A]; A01C0007-20 [1,A]
IPCR A01C0005-00 [1,C*]; A01C0007-00 [1,C*]
AB Ce semoir comprend un chassis [1] qui supporte une tremie (11) destinee a contenir la semence a distribuer, et qui est pourvu a l'avant d'un timon (10) d'attelage a un tracteur, une serie de bras porteurs (2) etant disposes longitudinalment cote a cote sous ce chassis (1), et supportes par celui-ci, avec une certaine liberte de debattement en direction verticale, chaque bras porteur (2) etant equipe de disques semeurs (5a, 5b) et de rouleaux suivieurs (6a, 6b). Ce semoir est remarquable en ce que chaque bras (2) est solidaire du chassis (1) par l'intermediaire d'une paire de systemes d'articulation elastiques disposees l'un (3) a son extremite avant et l'autre (4) a son extremite arriere, chacun d'eux travaillant a la torsion, de maniere a developper un couple qui sollicite le bras vers le bas afin d'appliquer ferement les disques semeurs (5a, 5b) et le rouleau suiveur (6a, 6b) contre le sol. Materiel agricole.
GIS 8963
CT DISC; TORSION SPRING; RUBBER; AGRICULTURE; DIRECT DRILLING; GAUGE WHEEL; DEPTH CONTROL; FURROW OPENER; PRESS WHEEL
CTFR AGRICULTURE; SEMOIR; SEMI S DI RECT; DISQUE; TERRAGE; ROUE; RESSORT; TORSION; CAOUTCHOUC; ROUE DE Jauge
LS Amended Clai ms
FA AB AG AI CT GI IN LS PA PI RE
### 15.7 Selected Fields

<table>
<thead>
<tr>
<th>Accession number and update codes</th>
<th>An</th>
<th>Ed, Up</th>
<th>An</th>
<th>Ed, Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents information</td>
<td>Bi, Ti, Ab</td>
<td>Ti, Ab</td>
<td>Ti, Ab</td>
<td></td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER; IPC1-7: IC, ICM, ICS, ICA, MGR, SGR</td>
<td>IPC8: IPC, IPC.TAB, IPCI, IPCR; IPC1-7: IC, ICM, ICS, ICA, IPC, IPC8: IPC, IPCI, IPCR, IPC.A, IPC.AI, IPC.C, IPC.CI, IPC.F; IPC1-7: IC, ICM, SCG, SCL, ICS, SCGS, SCLS, ICA, SCGA, SCLA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td>In, Ina</td>
<td>In</td>
<td>Ina</td>
<td></td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS), PA.AP, PA.AS</td>
<td>PA (CS)</td>
<td>PA (CS), PA.AP, PA.AS</td>
<td></td>
</tr>
<tr>
<td>Agent</td>
<td>AG</td>
<td>AG</td>
<td>AG</td>
<td></td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRY, PRN, PRT, PRN0, APPS</td>
<td>PRAI</td>
<td>PRAI, PRC, PRD, PRY, PRN, PRT, PRAO, APPS</td>
<td></td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AY, APPS</td>
<td>AI</td>
<td>AC, AD, AY, APPS</td>
<td></td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PY, PN (PATS), PK, PIT</td>
<td>PI (PATS), PIT</td>
<td>PC, PD, PY, PI, PN, PK, PIT</td>
<td></td>
</tr>
<tr>
<td>Related documents</td>
<td>RLC, RLNO, RLT, RLIO</td>
<td>RLIO</td>
<td>RLC, RLIO, RLNO</td>
<td></td>
</tr>
<tr>
<td>Citations</td>
<td>REN, RPC, RPD, RPN, RPK, RRI, NSRBPI, NSR.PD</td>
<td>RE, REN, REP, RRI, NSR</td>
<td>REN, RPC, REP, RPN, RPK, RRI, NSRBPI, NSR.PD</td>
<td></td>
</tr>
<tr>
<td>Legal status</td>
<td>Li, LI, LINM, LIT LS, LS.LD, LS.NPD, LS.NPR, LS.GD, LS.GB, LS.RD, LS.SD SPC, SPC.A, SPC.BPI, SPC.DA, SPC.DAD, SPC.DN, SPC.DNM, SPC.GB, SPC.GD, SPC.LD, SPC.PA, SPC.PD, SPC.RD, SPC.VD</td>
<td>Li</td>
<td>Li, LI, LINM, LIT LS, LS.LD, LS.NPD, LS.NPR, LS.GD, LS.GB, LS.RD, LS.SD SPC, SPC.A, SPC.BPI, SPC.DA, SPC.DAD, SPC.DN, SPC.DNM, SPC.GB, SPC.GD, SPC.LD, SPC.PA, SPC.PD, SPC.RD, SPC.VD</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>DT, FA</td>
<td>DT, FA, GI</td>
<td>DT, FA</td>
<td></td>
</tr>
</tbody>
</table>

#### 15.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
</tbody>
</table>
16 FRFULL

16.1 Typical queries
- Full-text display of French patent and utility model applications:
  What are the claims of the French application numbered FR 2 848 378?
- Searches by number, names, text, classification (IPC) to retrieve full text:
  What French applications of TOTAL FINA ELF have been published in the field of Seismology (G01V001) during the past year?
- SDI searches for French patents
- Using the full-text to find material for an opposition
- Multi-file searches in combination with other national or regional patent databases

16.2 Brief description
Producer: LexisNexis Univentio B.V., Netherlands
Period covered: Since 1900
Size: More than 2.3 million records on patents and utility models, more than 1.9 million patent images (August 2014)
Updated: Weekly
Languages: French, English titles and abstracts

16.3 Contents
- Full text of French patents of inventions FRA (claims and description in French and English) from 1902 to 1968
- Full text of French patent applications FRA1 (claims and description in French and English) since 1969
- French patents of invention FRB1 with abstracts in English and French since 1973, including claims and description in English and French since 1989
- Utility model applications
- Bibliographical details, title, claims, description, names (inventor, applicant)
- International Patent Classification, IPC1-8, IPC thesaurus, range searching is possible, re-classification of the back-file
- Cooperative Patent Classification (CPC), thesaurus, range searchable
- European Patent Classification (ECLA), ECLA thesaurus, range searchable; other European classifications: ICO, IDT, the codes are retained as historical data
- Abstracts, descriptions and claims in English are machine translated
- All texts are created using an Optical Character Recognition (OCR) software, thus there may be errors and omissions of text portions. A small number of documents don't contain any text because an error has occurred during scanning.
- Patent drawing (from the title page) if available
- Legal status information from INPADOCDB can be displayed (LS, LS2, FAM and CFAM field) but is not searchable.
16.4 Dynamics

The FRFULL database follows a mixed principle using segmentation. All publications of the same patent application form one documentation unit. Each document is entered into a separate record and will not be updated. The legal status is updated.

16.5 Updating

New data are entered in the database 1-2 weeks after the INPI publication date.

16.6 Document from FRFULL

Display format: MAXG

AN 2921323 FRFULL ED 20090325 EW 200911
UP 20101109
TIEN Brake control device for motor vehicle, has hollow rod including opening
to intake pressurized air, which circulates in rod till front chamber,
with respect to depression for driving displacement of piston and push
rod of master cylinder
TIFR DISPOSITIF DE COMMANDE DE FREIN A RESPIRATION PAR TIGE DE COMMANDE
IN BRIARD JEAN LUC
PA PEUGEOT CITROEN AUTOMOBILES SA SOCIETE ANONYME
PA.CNY FR
LAF French
DT Patent
PIT FRA1 APPLICATION FOR PATENT OF INVENTION, (FIRST PUBL.) (FROM
2,000,000)
PI FR 2921323 A1 20090327
AI FR 2007-57783 A 20070921
PRAI FR 2007-57783 A 20070921 *
PICI B60T0013-57 [I,A]: B60T0013-569 [I,A]; B60T0013-575 [I,A];
B60T0015-10 [I,A]
EPC B60T0013-57; B60T0015-10
ABEN Screw locking device of a vehicle, in particular of a motor vehicle,
including/understanding a case of amplifier (1) divided into two rooms
(2, 3) via a piston of order (4a). The case (1) of amplifier is
subjected to a depression ready to be communicated from one room to
another. The piston of order (4a) is interdependent of a body of order
(4b) inside whose moves a stem of order (12) under the effect of a
mechanical force produced by support on brake pedals of the vehicle,
characterized in that the stem of order (12) is hollow and comprises an
opening (22) on its side face. This opening 22, allows an air inlet
under pressure, compared to the depression, circulating in the stem of
order to the room before (2), involving the displacement of the piston
order (4b) and the stem of thorough (24) Master-cylinder (9).

ABFR Dispositif de freinage d'un vehicule, notamment d'un vehicule
automobile, comprenant un boitier d'amplificateur (1) divise en deux
chambres (2, 3) par l'intermediaire d'un piston de commande (4a). Le
boitier (1) d'amplificateur est soumis a une depression apte a etre
communiquee d'une chambre a l'autre. Le piston de commande (4a) est
solidaire d'un corps de commande (4b) a l'interieur duquel se deploie
une tige de commande (12) sous l'effet d'une force mecanique produite
par appui sur une pedale de frein du vehicule, caracterise en ce que la
tige de commande (12) est creuse et comporte un orifice (22), sur sa
face laterale. Cet orifice 22, permet une admission d'air sous pression,
par rapport a la depression, circulant dans la tige de commande jusqu'a
la chambre avant (2), entrainant le deplacement du piston de commande
(4b) et la tige de pousssee (24) du maître-cylindre (9).

DETFR Dispositif de commande de frein a respiration par tige de commande
Domaine de l'invention La presente invention concerne un dispositif de
commande de frein principal d'un vehicule, notamment d'un vehicule
automobile, cette commande s'effectuant notamment par action de l'air
sous pression ou en depression effectuee par une tige de commande. Ce
dispositif a pour but d'augmenter l'effort maximum que peut fournir un
amplificateur d'effort de freinage sans augmenter le volume de l'amplificateur et, par conséquence, d'augmenter la pression maximum que pourra délivrer un maître-cylindre aux récepteurs de frein. Etat de la technique Un dispositif de commande de frein à respiration permet de renforcer l'action d'un conducteur de véhicule automobile lorsque celui-ci appuie sur la pédale de frein du véhicule pour ralentir le dernier. Ce dispositif est placé avant un maître-cylindre et a pour but d'amplifier la pression de sortie du maître-cylindre. Ce maître-cylindre est commandé par la depression du moteur et l'action mécanique de la pédale de frein. Ce type de dispositif est aussi appelé amplificateur.

Patent databases on STN International

CLMFR

1 - Dispositif de freinage d'un véhicule, notamment d'un véhicule automobile, comprenant un boîtier (1) d'amplificateur divisé en deux chambres (2, 3) par l'intermédiaire d'un piston de commande (4a), le boîtier d'amplificateur étant soumis à une depression apte à être communiquée d'une chambre à l'autre, l'édit piston de commande (4a) étant solidaire d'un corps de commande (4b) à l'intérieur duquel se déplace une tige de commande (12) sous l'effet d'une force mécanique produite par appui sur une pédale de frein du dit véhicule, caractérisé en ce que la tige de commande (12) est creuse et comporte un orifice (22), sur sa face laterale, permettant une admission d'air sous pression, par rapport à la depression, circulant dans la tige de commande jusqu'à la chambre avant (2), entrainant le déplacement du piston de commande (4b) et la tige de pousse (24) du maître-cylindre (9).

2 - Dispositif selon la revendication 1 caractérisé en ce qu'il comporte un distributeur (14) fixé à l'embout de la tige de commande (12) et apte à se loger à l'intérieur d'un support (16) de distributeur (14) de telle sorte que l'interposition d'un disque clapet (20) sur le support (16) de distributeur (14) forme un premier clapet (A).

8 - Véhicule automobile caractérisé en ce qu'il comporte un dispositif de freinage selon l'une quelconque des revendications 1 à 5.

DETDEN

Control device of brake with breathing by stem of Domaine order of the invention the present invention relates to a control device of principal brake of a vehicle, in particular of a motor vehicle, this order being carried out in particular by action of the air under pressure or in depression carried out by a stem of order. This device with for goal to increase the maximum effort that an amplifier of braking force can provide without increasing the volume of the amplifier and, by consequence, to increase the maximum pressure which a Master-cylinder with the receives of brake will be able to produce. State of the art a control device of brake with breathing allows to reinforce the action of a driver of motor vehicle when this one presses on the brake pedals of...

CLMEN

1 - Screw-locking device of a vehicle, in particular of a motor vehicle, including/understanding a case [1] of amplifier divided into two rooms (2, 3) via a piston of order [4a], the case of amplifier being subjected to a depression ready to be communicated from one room to another, the aforementioned piston of order [4a] being interdependent of a body of order (4b) inside whose moves a stem of order (12) under the effect of a mechanical force produced by support on brake pedals of the known as vehicle, characterized in that the stem of order (12) is hollow and comprises an opening (22), on its side face, allowing an air inlet under pressure, compared to the depression, circulating in the stem of order to the room before (2), involving the displacement of the piston of order (4b) and the stem of thorough (24) Master-cylinder (9).

2 - Device according to claim 1 characterized in that it comprises a distributor (14) fixed at the end of the stem of order (12) and ready to be placed inside a support (16) of distributor (14) so that the interposition of a disc valve (20) on the support (16) of distributor (14) form a first valve (A).
The device has an amplifier box divided into front and rear chambers (2, 3) by a control piston (4a) and subjected to depression. A hollow control rod (12) is moved inside a control body (4b) under an effect of a mechanical force produced by supporting on a brake pedal of a motor vehicle, where the piston is integrated to the control body. The rod comprises an opening on its lateral surface to intake pressurized air, which circulates in the rod till the front chamber, with respect to the depression for driving displacement of the piston and a push rod (24) of a master cylinder (9). An independent claim is also included for a method of actuating a motor vehicle braking device.
## 16.7 Selected Fields

<table>
<thead>
<tr>
<th>FRFULL</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, EW, UP, UW</td>
<td>AN ED, EW, UP, UW</td>
<td>AN ED, EW, UP, UW</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI TI AB CLM, MCLM</td>
<td>TIFR (TI), TIEN ABFR (AB), ABEN, CLM, MCLM</td>
<td>TIFR (TI), TIEN ABFR (AB), ABEN, CLM, MCLM</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER; IPC1-7: IC, ICM, ICS CPC: CPC, CPC.ACD, CPC.KW, CPC.VER</td>
<td>IPC8: IPC, IPC.TAB, IPCI, IPCR; IPC1-7: IC (IPC), ICM, ICS CPC: CPC, CPC.TAB</td>
<td>IPC8: IPC, IPCI, IPCR, IPC.A, IPC.AI, IPC.C, IPC.CI, IPC.F; IPC1-7: IC (IPC), ICM, ICS CPC: CPC</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU)</td>
<td>IN (AU)</td>
<td>IN (AU)</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS), PA.CNY</td>
<td>PA (CS), PA.CNY</td>
<td>PA (CS), PA.CNY</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD PRY, PRYF PRN PRT APPS</td>
<td>PRAI, PRN</td>
<td>PRC, PRD PRY, PRYF PRAI, PRN PRT APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AY AP, APPS</td>
<td>AI (AP)</td>
<td>AI (AP) AC, AD, AY AP, APPS</td>
</tr>
<tr>
<td>Publication data</td>
<td>PN PC, PD, PY PK PIT</td>
<td>PI (PN)</td>
<td>PI (PN) PC, PD, PY PK PIT</td>
</tr>
<tr>
<td>Legal status</td>
<td>CLMN, DETN, DT, GIS, LA, LAF, FA</td>
<td>CLMN, DETN, DT, GI, GIS, LA, LAF, FA</td>
<td>CLMN, DETN, DT, GIS, LA, LAF, FA</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 16.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN</td>
</tr>
<tr>
<td>International Patent Classification</td>
<td>IPC</td>
<td>ICM, ICS</td>
</tr>
</tbody>
</table>
17 GBFULL

17.1 Typical queries

- Searches for the state of the art in Great Britain (text and classification), e.g.: What inventions were made in Britain on the Noise Analysis of Gears?
- Name searches (inventor, applicant), e.g.: What inventions by Wonderland Nursery Goods were published in Britain during the past year? What patent applications are there in Britain of Mr Michael Jackson?
- Searches using formal data (e.g. numbers), e.g.: What is contained in the British application numbered GB 2404827?
- Full-text display of British patent applications: What are the claims of the British application numbered GB 2267771?
- Legal status display: Is the patent, GB 2258563, in force?
- SDI searches for British patents
- Using the full-text to find material for an opposition
- Multi-file searches in combination with other national or regional patent databases

17.2 Brief description

Producer: LexisNexis Univentio B.V., Netherlands
Period covered: Since 1840
Size: More than 2.3 million records on patents, more than 1.7 million patent images (August 2014)
Updated: Weekly
Languages: English

17.3 Contents

- Full text from British patent specifications (claims and description) from 1840
- Full text from British patent applications (claims and description) from 1979
- Bibliographical details, title, names (inventor, applicant)
- International Patent Classification, IPC1–8, IPC thesaurus, range searching is possible, re-classification of the back-file
- Cooperative Patent Classification (CPC), thesaurus, range searchable
- European Patent Classification (ECLA), ECLA thesaurus, range searchable; other European classifications: ICO, IDT, the codes are retained as historical data
- Abstracts partly available
- All texts are created using an Optical Character Recognition (OCR) software, i.e. there may be errors and omissions of text portions. A small number of documents don’t contain any text because an error has occurred during scanning.
- Patent drawing (from the title page) if available
Patent databases on STN International

- Legal status information from INPADOCDB can be displayed (LS, LS2, FAM and CFAM field) but is not searchable in GBFULL.

17.4 Dynamics

The GBFULL database follows a mixed principle using segmentation. All publications of the same patent application form one documentation unit. Each document is entered into a separate record and will not be updated. The legal status is updated.

17.5 Updating

New data are entered in the database 4 days after the publication date.

17.6 Document from GBFULL

Display format: ALLG

AN 2404729 GBFULL ED 20050307 EW 200506
UP 20081130
TI FUEL INJECTION ARRANGEMENT FOR GASEOUS FUEL AND/OR LIQUID FUEL
IN TOON IAN JAMES; EADON GARY; GRAHAM ANDREW CHARLES; SALT ALLAN JOHN
PA ROLLS ROYCE PLC
PA.CNY GB
LA English
DT Patent
PIT GBA PATENT SPECIFICATION (UNDER 2,000,000) OR PUBLISHED PATENT
APPLICATION (FROM 2,000,000)
PI GB 2404729 A 20050209
AI GB 2003-18605 A 20030808
PRAI GB 2003-18605 A 20030808 *
ICM F23D0017-00
ICS F02C0009-40; F23R0003-36
EPC F23R0003-30; F23R0003-28D; F23R0003-36
AB A fuel injection arrangement (20 fig 2) for a turbine engine has a
gaseous fuel injection means and a liquid fuel injection means which are
both able to present fuel (7,9 fig 1) to a combustor (3 fig 1). The
liquid fuel injection means incorporates an injection conduit for
airflow 10 and a liquid fuel jet 30 presented at a high angle relative
to the airflow. In use, at low fuel injection rates the airflow entrains
and atomises fuel expelled by the fuel jet without impingement upon the
injection conduit 31, and at high fuel injection rates fuel expelled by
the liquid fuel jet impinges upon the injection conduit 31 to form a
film (43 fig 4) which is subsequently atomised by the airflow. The
injection conduit may progressively constrict towards an outlet 32,
which may be approximately 1mm wide, and the liquid fuel jet may be
inclined relative to the conduit to increase the distance before jet
impingement occurs. The fuel jet may be round, oval, or square, and less
than 1mm wide. The fuel injection arrangement allows alternative liquid
fuels to be used such as diesel or kerosene, and a plurality of
arrangements may form a fuel injection assembly.

DETD 1 Fuel Injection The present invention relates to fuel injection and
more particularly to fuel injection arrangements to allow dual fuel
combustion in a combustor of a turbine engine. Operation of turbine
ingines is well known and involves the use of a combustor in order to
combust a fuel and therefore provide rotary power for the prime mover
engine. Turbine engines are used in a wide variety of situations and the

Whilst endeavouring in the foregoing specification to draw attention to
those features of the invention believed to be of particular importance
it should be understood that the Applicant claims protection in respect
of any patentable feature or combination of features hereinbefore
referred to and/or shown in the drawings whether or not particular
emphasis has been placed thereon.
1. A fuel injection arrangement (6) for a turbine engine, the arrangement (6) including gas fuel injection means (24) to present gaseous fuel and liquid fuel injection means (8) to present liquid fuel to a combustor (2), the arrangement (6) characterised in that the liquid fuel injection means (8) incorporates an injection conduit (31) for an airflow (10) and a liquid fuel jet (30) presented at a high angle relative to the airflow (10) such that in use at low fuel injection rates (28a) the airflow (10) entrains and atomises fuel expelled by the fuel jet (30) without impinging upon the injection conduit (31) whilst at high fuel injection rates (28b) fuel expelled by the liquid fuel jet (30) impinges upon the injection conduit (31) to form a wash film (43) predictably atomised by the airflow (10), so that entrained and/or said atomised liquid fuel is interchangeable with gas fuel presented through the gas fuel injection means (24).

2. An arrangement (6) as claimed in claim 1 wherein the injection conduit (31) is progressively constrictive towards an outlet (32) in order to approximate a flat flow velocity profile for the airflow (10) across the conduit (31) at the fuel jet.

27. Any novel subject matter or combination including novel subject matter disclosed herein, whether or not within the scope of or relating to the same invention as any of the preceding claims.
The present invention relates to fuel injection and more particularly to fuel injection arrangements to allow dual fuel combustion in a combustor of a turbine engine.

Operation of turbine engines is well known and involves the use of a combustor in order to combust a fuel and therefore provide rotary power for the prime mover engine. Turbine engines are used in a wide variety of situations and the present invention has particular applicability to stationary engines utilised for electrical power generation and providing power for pumping operations etc. It will be understood that turbine engines are utilised in situations such as oil platforms where a local electricity generator and possibly pumping operations are required. In these situations generally natural gas drawn from production will be used in normal operation. However, during construction of the platform and during periods of no gas production the turbine engine must still remain operational at least to provide an electrical power source.

1. A fuel injection arrangement (6) for a turbine engine, the arrangement including a gaseous fuel injection means (24) to present gaseous fuel and a liquid fuel injection means (8) to present liquid fuel to a combustor (2), the arrangement characterised in that the liquid fuel injection means (8) incorporates an injection conduit (31) for an airflow (10) and a liquid fuel jet (30) presented to the airflow wherein the liquid fuel injection means is capable of injecting fuel between a first fuel rate (28a) where the liquid fuel expelled by the fuel jet (30) without impingement upon the injection conduit (31) and a second and higher fuel injection rate (28b) wherein fuel expelled by the liquid fuel jet (30) impinges upon the injection conduit (31) to form a wash film (43) predictably atomised by the airflow (10), and wherein the entrained and/or said atomised liquid fuel is interchangeable with gas fuel presented through the gas fuel injection means (24).

2. An arrangement (6) as claimed in claim 1 wherein the injection conduit (31) is progressively constrictive towards an outlet (32) in order to approximate a flat flow velocity profile for the airflow across the conduit (31) at the fuel jet.

28. A method as claimed in claim 27 comprising the further step of the entrained and/or said atomised liquid fuel is interchanged with gas fuel presented through the gas fuel injection means (24).
Guide to STN Patent Databases

17.7 Selected Fields

<table>
<thead>
<tr>
<th>GBFULL</th>
<th>SEARCH</th>
<th>DISPLAY*</th>
<th>SELECT*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, EW, UP, UW</td>
<td>AN ED, EW, UP, UW</td>
<td>AN ED, EW, UP, UW</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI TI AB CLM, MCLM</td>
<td>TI AB CLM, DETD, MCLM</td>
<td>TI AB CLM, DETD, MCLM</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER; IPC1-7: IC, ICM, ICS; CPC: CPC, CPC.ACD, CPC.KW, CPC.VER</td>
<td>IPC8: IPC, IPC.TAB, IPCI, IPCR; IPC1-7: IC (IPC), ICM, ICS; CPC: CPC, CPC.TAB</td>
<td>IPC8: IPC, IPCI, IPCR, IPC.A, IPC.AI, IPC.C, IPC.CI, IPC.F; IPC1-7: IC (IPC), ICM, ICS; CPC: CPC</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU)</td>
<td>IN (AU)</td>
<td>IN (AU)</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS), PA.CNY</td>
<td>PA (CS), PA.CNY</td>
<td>PA (CS), PA.CNY</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRY, PRYF, PRN, PRT APPS</td>
<td>PRAI, PRN</td>
<td>PRC, PRD, PRY, PRYF, PRAI, PRN, PRT APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AY AP, APPS</td>
<td>AI (AP)</td>
<td>AI (AP) AC, AD, AY AP, APPS</td>
</tr>
<tr>
<td>Publication data</td>
<td>PN PC, PD, PY, PK, PIT</td>
<td>PI (PN) PIT</td>
<td>PI (PN) PC, PD, PY, PK, PIT</td>
</tr>
<tr>
<td>Legal status</td>
<td>LS, LS2, FAM, CFAM</td>
<td>LS, LS2</td>
<td>LS, LS2</td>
</tr>
<tr>
<td>Other</td>
<td>CLMN, DETN, DT, GIS, LA, LAF, FA</td>
<td>CLMN, DETN, DT, GIS, LA, LAF, FA</td>
<td>CLMN, DETN, DT, GIS, LA, LAF, FA</td>
</tr>
</tbody>
</table>

* For DISPLAY and SELECT of many fields the desired publication level can be specified:
  .M → all publication levels in all languages are included
  .PK → certain publication levels in all languages are included

17.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN</td>
</tr>
<tr>
<td>International Patent Classification</td>
<td>IPC</td>
<td>ICM, ICS</td>
</tr>
</tbody>
</table>
18 IFIALL

18.1 Typical queries

- Search for current US publications using text, names, international or national (US) classification, e.g.:
  - Have there been new publications (up to last week) by American Cyanamid Co.?
  - What does the US Patent & Trademark Office have on the subject of removing alcohol from alcoholic beverages to produce non-alcoholic ones?
  - What patents have been published in the USA in the field of spectral analysis (classes in the US classification system: 324/076.190, 324/076.210, 324/076.220)?

- Searches using numbers or other formal data, e.g.:
  - What are the claims for patent US 5,749,087?

- Display of the bibliographical details with all claims
- SDI for US publications
- Using the full-text to find material for an opposition
- Multi-File searches with other national and regional patent databases

18.2 Brief description

**Producer:** IFI CLAIMS® Patent Services, USA

**Period covered:** Since 1950

**Size:** More than 10.2 million records (August 2014)

**Updated:** Twice per week

**Language:** English

18.3 Contents

- Extracts from the US Patents granted by the US Patent and Trademark Office (USPTO), as published in the Official Gazette (including Utility Patents, Defensive Publications, Design Patents and Reissue Patents, Statutory Invention registrations, Plant Patents) from 1963 onwards, and in the field of chemistry from 1950 onwards

- Published applications since 15 March, 2001

- Bibliographical details (title, publication number and date, number and date of application, applicant, inventor)

- Abstract (AB), Exemplary Claim, all Claims (CLM) since 1971

- U.S. Classification codes (the current one in the NCL field (NCLM, NCLS), that at the time of publication in the INCL field); made accessible through the IFIREF database

- International Patent Classification, IPC1-8, online thesaurus, range searching is possible

- For chemistry patents before 2011-01-25:
  - Uniterm Codes and Controlled Terms
  - CAS Registry Number (RN) and references to the CAPLUS database
  - Fragment Codes for Substructure Searching of chemical substances
  - Role Indicators for chemical substances

- CAS Registry Number (RN) and references to the CAPLUS database for chemical patents
Guide to STN Patent Databases

- Details of the examination: References (REN, REP), Examiner’s Name (EXNAM), Examiner’s ‘Field of Search’ (EXF)
- Further details: legal representative (Agent: AG, LREP)
- Expiration Date (XPD), Disclaimer Date (DCD) for patents, Term of Patent (PTERM) for Design Patents
- Details of documents related to the present one through Division, Continuation or Continuation-in-part
- Details of other members of the patent family in BE, DE, FR, GB, NL and US (in older documents)
- US legal status data can be found in IFICLS – Current Patent Legal Status Database. IFICLS holds the current legal status of US patents including Reassigned Patents, Re-examined Patents, Expired Patents, Reinstated Patents, Certificates of Correction, Adverse Decision in Interference, Disclaimer/Dedication, Reexamination Request, Reissue Request

IFIALL is the successor of the formerly separate IFIPAT, IFICDB and IFIUDB databases. In addition there are the IFIREF and IFICLS databases, all belonging to the IFIClaims.

18.4  Dynamics

The IFIALL database follows the ‘static principle using separate documents’. When the application is published a document is introduced in the database and the bibliographical details and text information will be entered. Once a patent has been granted the new publication will be entered in a second document with its details and text information. Some of the fields in both documents will be updated in the course of the patent’s life: The numbers of the application and of the granted patent are entered in the PI field. The number of the application is entered in the PI field of the record of the granted patent. The data on citations in later patents (PI and PNC.G fields) and specifications of the document type (DT field) and the national classification (NCL field) are updated or amended. The application document is completed with the patent assignee name in the PPA field when the granted patent is published. The legal status of patents from IFIALL can be found in the IFICLS database.

The database is updated twice per week. After being matched with the US Patent Classification, IFIALL is reloaded semi-annually.

18.5  Updating

New documents appear in the database 1 day after publication.

18.6  Documents from IFIPAT

18.6.1  Patent Application

Display format: ALL

IFIALL  COPYRIGHT 2013 IFI on STN
AN 17778577 IFIALL
TI Generation Of Plants With Altered Oil Content; introducing into progenitor cells of the plant a plant transformation vector containing a nucleotide sequence that encodes or is complementary to a sequence that encodes a High Oil polypeptide; transgenic plants; seed oil
INF Davies; John, Portland, OR, US
Lightner; Jonathan, Des Moines, IA, US
Tseng Ng; Hein, Beaverton, OR, US
IN Davies John; Lightner Jonathan; Tseng Ng Hein
PAF Unassigned
PA Unassigned Or Assigned To Individual (68000)
PPA Agrinomics LLC
PPA Agrigenetics Corp
PPA Exelixis Plant Sciences Inc (Probable)
AG Klarquist Sparkman, LLP, 121 SW Salmon St., Floor 16, Portland, OR, 97204, US
PI US 20080118622 A1 20080522
AI US 2005-578894 20050420 (11)
WO 2005-US13398 20050420
20061020 PCT 371 date
20061020 PCT 102(e) date
The present invention is directed to isolated HIO41 nucleic acid and protein, and to plants that display an altered oil content phenotype due to altered expression of a HIO41 nucleic acid. The invention is further directed to methods of generating plants with an altered oil content phenotype.

1. A transgenic plant comprising a plant transformation vector comprising a nucleotide sequence that encodes or is complementary to a sequence that encodes a HIO41 polypeptide comprising the amino acid sequence of SEQ ID NO:2, or an ortholog thereof, whereby the transgenic plant has a high oil phenotype relative to control plants.

2. The transgenic plant of claim 1, which is selected from the group consisting of rapeseed, soy, corn, sunflower, cotton, cocoa, safflower, oil palm, coconut palm, flax, castor and peanut.

3. A plant part obtained from the plant according to claim 1.

4. The plant part of claim 3, which is a seed.

5. Meal produced from the seed of claim 4.

6. A method of producing oil comprising growing the transgenic plant of claim 1 and recovering oil from said plant.

7. The method of claim 6, wherein the oil is recovered from a seed of the plant.

8. A method of producing a high oil phenotype in a plant, said method comprising: introducing into progenitor cells of the plant a plant transformation vector comprising a nucleotide sequence that encodes or is complementary to a sequence that encodes a HIO41 polypeptide comprising the amino acid sequence of SEQ ID NO:2, or an ortholog thereof, and growing the transformed progenitor cells to produce a transgenic plant, wherein said polynucleotide sequence is expressed, and said transgenic plant exhibits an altered oil content phenotype relative to control plants.


10. The plant of claim 9, which is selected from the group consisting of rapeseed, soy, corn, sunflower, cotton, cocoa, safflower, oil palm, coconut palm, flax, castor and peanut.

11. A method of generating a plant having a high oil phenotype comprising identifying a plant that has an allele in its HIO41 gene that results in increased oil content compared to plants lacking the allele and generating progeny of said identified plant, wherein the generated progeny inherit the allele and have the high oil phenotype.

12. The method of claim 11 that employs candidate gene/QTL methodology.

13. The method of claim 11 that employs TILLING methodology.
AB The present invention is directed to isolated Hi041 nucleic acid and protein, and to plants that display an altered oil content phenotype due to altered expression of a Hi041 nucleic acid. The invention is further directed to methods of generating plants with an altered oil content phenotype.

NTE INDEXED FROM APPLICATION Subject to any Disclaimer, the term of this patent is extended or adjusted under 35 USC 154(b) by 1104 days.
ID NO: 2; growing the transformed progenitor cells to produce a transgenic plant, wherein said polynucleotide sequence is expressed; identifying the transgenic plant that exhibits a high oil phenotype relative to a plant of the same species not comprising the plant transformation vector; and recovering oil from said transgenic plant.

ACLM
2. The method of claim 1, wherein the oil is recovered from a seed of the plant.
3. A method of producing a plant having a high oil phenotype, said method comprising: introducing into progenitor cells of the plant a plant transformation vector comprising a nucleotide sequence that encodes a HI041 polypeptide comprising the amino acid sequence set forth as SEQ ID NO:2, or an amino acid sequence having at least 95% sequence identity to the amino acid sequence set forth as SEQ ID NO:2; growing the transformed progenitor cells to produce a transgenic plant, wherein said polynucleotide sequence is expressed; and identifying the transgenic plant that exhibits a high oil phenotype relative to a plant of the same species not comprising the plant transformation vector.
4. The method of claim 3, wherein the nucleotide sequence encodes a HI041 polypeptide having an amino acid sequence having at least 95% sequence identity to the amino acid sequence of SEQ ID NO:2.
5. The method of claim 4, wherein the nucleotide sequence encodes a HI041 polypeptide having the amino acid sequence set forth as SEQ ID NO:2.
6. The method of claim 5 wherein the nucleotide sequence encodes a HI041 polypeptide consisting of the amino acid sequence set forth as SEQ ID NO:2.

REP
US 0045049 Mar 2004 Zhang et al.
US 0101481 May 2003 800278000 Zhang et al.
US 5639790 Jun 1997 Voelker et al.
US 5704160 Jan 1998 Bergquist et al.
US 6229033 May 2001 Knowlton
US 6248939 Jun 2001 Leto et al.

REP
EP 1033405 Sep 2000
WO 183697 Nov 2001
WO 3079766 Oct 2003
WO 9958654 Nov 1999

REN
Eccleston and Ohlrogge, "Expressions of lauroyl-acyl carrier protein thioesterase in Brassica napus seeds induces pathways for both fatty acid oxidation and biosynthesis and implies a set point for triacylglycerol accumulation," Plant Cell. 10:613-621, 1998.


Kang and Singh, "Characterization of salicylic acid-responsive, arabi


Lionnet et al., "Development of an AFLP-based linkage map and localization of QTLs for seed fatty acid content in con
diment mustard (Brassica juncea)," Genome, 45(6):1203-1215, 2002.


O'Hara et al., "Fatty acid and lipid biosynthetic genes are expressed at constant molar ratios but different absolute levels during embryogenesis," Plant Physiol., 129:310-320, 2002.


CURRENT U.S. PATENT CLASSIFICATION:
MAIN: 800281000
IPC [08] C12N0015-82
IPC C12N0015-82 [1]
ART UNIT: 168
CONTROLLED TERMS:
General Uniterms:
ADJUSTMENT 00093; CASTOR OIL 00896-10; COCOA 01142; COCONUT OIL 01144-10; COCONUTS 01145; CORN 01312; CORN OIL 01313-10; COTTON 01329-10; COTTONSEED OIL 01331-10; FLAX 02224-10; FLOWERS 02252; GENERATION 02434; HERBS 02630; MEAL 03300; PALM OIL 03849-10; PEANUTS 03907; PLANTS/ORGANISMS/ 04105; POLYPEPTIDES 04585; RECOVERING 04585; SAFFLOWER OIL 04788-10; SEEDING 04892; SEEDS 04893; SOYBEAN MEAL 05163-10; SOYBEANS 05166; SUNFLOWER OIL 05380-10; TRANSFORMATION 05683; VEGETABLE OILS 05866-10; CTD/PROCESS/ 06232; CTD/M&D/OTHER-INCLUDES DOSAGE FORMS, MEDICAL EQUIPMENT/ 06233; SAFFLOWER MEAL 06503-10; FREE/ABSENCE/ 07573; GENETIC ENGINEERING 07984; GENES 08073; VECTORS/GENETIC/ 08246; ALLELES 08662; COMPLEMENTARITY 08695; PHENOTYPES 08898; AMINO ACID SEQUENCES 09046; NUCLEOTIDE SEQUENCES 09073; STEM CELLS 09089; VEGETABLE, ANIMAL AND FISH OILS/CT/ 10009; PURIFICATION OR SEPARATION/CT/ 10020; CTD/P/BIO/TECH, BIOSYNTHESIS, BIDECORATION, CULTURING/ 10055; CTD/M&D/LIVING ORGANISM, CELL, MICROORGANISM, VIRUS, PLANT/ 10069; PROGENY 10778; PLANT-TRANSGENIC/CLAIMED OR NOVEL/ 10973; LUBRICATIONS/CT/ 11240;
### 18.7 Selected Fields

<table>
<thead>
<tr>
<th>IFIALL</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN</td>
<td>AN</td>
<td>AN</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, TI, AB, CLM</td>
<td>TI, AB CLMN, ECLM, ACLM BOTI</td>
<td>Ti, AB CLM BOTI</td>
</tr>
<tr>
<td>Indexing</td>
<td>RN, FG, UN, URN</td>
<td>RN, CT, FG, UN, URN</td>
<td></td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER, IPC.OLD, IPC1, IPC.R, IPC.S</td>
<td>IPC8: IPC, IPC.TAB, IPCI, IPC.R; IPC.HIT, IPC.UNIQ IPC1-7: IC, MGR, SGR ICM, ICS IPC1-7: IC (IPC), ICM ICS USPC: NCL, NCLM, NCLS, NCLR INCL, INCLM, INCLS ARTU USPC: NCL, NCLM, NCLS INCL, INCLM, INCLS ARTU</td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU), INF</td>
<td>IN (AU), INF</td>
<td></td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS), PPA, PAF</td>
<td>PA (CS), PPA, PAF</td>
<td></td>
</tr>
<tr>
<td>Agent</td>
<td>AG (LREP)</td>
<td>AG (LREP)</td>
<td></td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD PRN, PRY, APPS</td>
<td>PRAI APPS PRAI PRC, PRD PRN, APPS</td>
<td></td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD AP, AY, APPS</td>
<td>AI APPS AI AC, AD AP, APPS</td>
<td></td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PY, PK, PNK PN PCS, PATS</td>
<td>PI PNK PI PC, PD, PY PN PCS, PATS</td>
<td></td>
</tr>
<tr>
<td>Family data</td>
<td>FC, FD, FY FN, PCS, PATS</td>
<td>FI PATS FI FC, FD FN PCS, PATS</td>
<td></td>
</tr>
<tr>
<td>Related documents</td>
<td>RLC, RLD, RLY RLN, RLPN RLP, RLT</td>
<td>RLI RLI RLC, RLD RLN, RLPN RLP, RLT</td>
<td></td>
</tr>
<tr>
<td>Citations</td>
<td>REN RPC, RPCL, RPD, RPIN, RPNI, PNCG, PCS, PATS</td>
<td>RE, REN REP PATS REP, RPC, RPCL, RPD, RPIN, RPNI, PNCG, PCS, PATS</td>
<td></td>
</tr>
<tr>
<td>Legal status data</td>
<td>EXNAM, DCD, DCD, PTERM, XPD, XPY, NTE</td>
<td>EXNAM, DCD, DCD, PTERM, XPD, XPY, NTE EXNAM, DCD, XPD, XPY, NTE</td>
<td></td>
</tr>
<tr>
<td>Sources</td>
<td>OS OS, MFN, MRN</td>
<td>OS</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>DT, CLMN, EXF, FS, LA, FA DT, CLMN, CLMI, EXF, FS, GI, GOVI</td>
<td>DT, EXF, FS, TI</td>
<td></td>
</tr>
</tbody>
</table>

#### 18.7.1 Super-Search-Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN, RLN</td>
</tr>
<tr>
<td>International Patent Classification</td>
<td>IPC</td>
<td>ICM, ICS</td>
</tr>
<tr>
<td>Patent Assignee Group</td>
<td>PASS</td>
<td>PA; PAF; PPA</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, RPC, FC</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, FN, RPNI</td>
</tr>
</tbody>
</table>
19  IFICLS

19.1 Typical queries
- Search for legal status of US publications, e.g.:
  - What is the expiry date of the US Patent, 5,565,473?
  - Is the US Patent, 6,385,755, still valid?

19.2 Brief description
Producer: IFI Patent Intelligence, a Wolters Kluwer Company, Wilmington, DE, USA
Period covered: Since 1980
Size: More than 3.5 million records (August 2014)
Updated: Weekly
Language: English

19.3 Contents
- IFICLS contains the current legal status of US Patents including:
  - Reassigned Patents
  - Reexamined Patents
  - Expired Patents
  - Reinstated Patents
  - Certificates of Correction
  - Adverse Decision in Interference
  - Disclaimer/Dedication
  - Reexamination Request
  - Reissue Request
- Only US documents are covered where one of the above legal events has occurred.

19.4 Dynamics
The IFICLS database follows the dynamic principle. Legal status changes are added.

19.5 Updating
No details available.

19.6 Documents from IFICLS
Display format: IALL
- Reassigned Patents include the patent number, former assignee, new assignee, reassignment type (e.g., full interest), date of reassignment, and reel and frame number of the USPTO microfilm record.

ACCESSION NO.: 4650154 IFICLS
PATENT ASSIGNEE: Chou, Nan-Chi
PATENT ASSIGNEE: Ding, Yuzheng
PATENT ASSIGNEE: Liu, Lung-Tien
Guide to STN Patent Databases

PATENT ASSIGNEE: Suaris, Peter Ramyalal
PATENT INFORMATION: US 7251803 20070731
DOCUMENT TYPE: REASSIGNED
REASSIGNMENT INFO.:
DATE: 20040423
KIND: ASSIGNMENT OF ASSIGNORS INTEREST
ASSIGNOR: Suaris, Peter R., Date Signed: 02/19/2004; Liu, Lung-Tien, Date Signed: 02/03/2004; Ding, Yuzheng, Date Signed: 01/30/2004; Chou, Nan-Chi, Date Signed: 02/19/2004
ASSIGNEE: Mentor Graphics Corporation, 8005 SW Boeckman Rd., Wilsonville, Oregon, 97070-7777
AGENT: Klarquist Sparkman, LLP, David P. Petersen, 121 S.W. Salmon Street, One World Trade Center, Suite 1600, Portland, OR 97204-2988
MICROFILM REEL NO: 015025
MICROFILM FRAME NO: 0487

• Reexamination records include the patent number, patent assignee, name and location of the party requesting reexamination, reexamination request number and date, and reexamination certificate number and date. Also included is the text from the reexamination certificate describing the results of the reexamination.

ACCESSION NO.: 3379021 IFICLS
PATENT ASSIGNEE: Meinan Machinery Works Inc JP
PATENT INFORMATION: US 6112786 20000905
DOCUMENT TYPE: REEXAMINED; REEXAMINATION REQUESTED
REEXAMINATION REQUEST:
REQUESTOR: Meinan Machinery Works, Inc., Aichi, Japan
REQUEST NUMBER: 90/005897
REQUEST DATE: 20001227
OG DATE: 20010123
REEXAMINATION INFO.:
REQUESTOR: Meinan Machinery Works, Inc. Aichi JP
REQUEST NUMBER: 90/005897
REQUEST DATE: 20001227
CERTIFICATE NUMBER: C16112786 (4487th)
CERTIFICATE DATE: 20011106
CLAIM

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT: The patentability of claims 1-12 is confirmed. 1. a method of scarfing a plate-like material comprising the steps of: feeding a plate-like material to move said plate-like material in a predetermined direction; stopping said feed of the plate-like material at a predetermined cutting position where a cutter receiving table is provided on one of a top surface side and a back surface side of the plate-like material; pressing, toward said cutter receiving table, said plate-like material on the surface side opposite to said cutter receiving table at least at a portion to be cut away as a chip by means of a pressing member adapted for relative movement with respect to the plate-like material in a direction perpendicular to the predetermined direction; and scarfing said stopped plate-like material by means of a rotary cutter at said predetermined cutting position in the proximity of said pressing member, said rotary cutter being adapted for movement in the same direction as said pressing member at a same speed as said pressing member to follow said pressing member.

• Extension, expiration, and reinstatement records include the patent number, patent assignee, expiration, extension, or reinstatement date, and the publication date of the Official Gazette of the USPTO containing the announcement of action.

ACCESSION NO.: 2941606 IFICLS
PATENT ASSIGNEE: Yabumoto, Kan W
PATENT INFORMATION: US 5717951 19980210
DOCUMENT TYPE: EXPIRED
EXPIRED INFO.:
DATE: 20020210 OG DATE: 20020409

• Reexamination request records include patent assignee, patent information, and reexamination request information.

ACCESSION NO.: 4616629 IFICLS
Patent databases on STN International

PATENT ASSIGNEE: Bryant, Clyde C
PATENT INFORMATION: US 7222614 20070529
DOCUMENT TYPE: REEXAMINATION REQUESTED
REEXAMINATION REQUEST:
REQUEST NUMBER: 95/000265
REQUEST DATE: 20070529

• **Adverse decision records** include patent assignee, patent information, and adverse decision information.

  ACCESSION NO.: 4147973 IFICLS
  PATENT ASSIGNEE: Pfizer Inc
  PATENT INFORMATION: US 6809094 20041026
  DOCUMENT TYPE: ADVERSE DECISION
  ADVERSE DECISION IN INTERFERENCE:
  INTERFERENCE NO: 105369
  DECISION DATE: 20060817
  OG DATE: 20070213
  CLAIMS AFFECTED: as to claims 1-4, 9, 11-13

• **Disclaimer/dedication records** include patent assignee, patent information, and disclaimer information.

  ACCESSION NO.: 4427621 IFICLS
  PATENT ASSIGNEE: International Business Machines Corp
  PATENT INFORMATION: US 7061590 20060613
  DOCUMENT TYPE: DISCLAIMER/DEDICATION
  DATE: 20051024
  OG DATE: 20060801
  TEXT: The term of this patent, subsequent to the term of patent number 6,731,378

• **Reissue request records** include patent assignee, patent information, reissue request information, and reissue patent number.

  ACCESSION NO.: 4587364 IFICLS
  PATENT ASSIGNEE: Hastings, Mark
  PATENT INFORMATION: US 539527 20070403
  DOCUMENT TYPE: REISSUE REQUESTED
  REISSUE REQUEST:
  REQUEST NUMBER: 29/288312
  REQUEST DATE: 20070606
  OG DATE: 20070724
  EXAMINATION GROUP: 2914

• **Records for certificate of correction** include patent assignee, patent information, and correction date.

  ACCESSION NO.: 4621857 IFICLS
  PATENT ASSIGNEE: Sanyo Electric Co Ltd JP
  PATENT INFORMATION: US 7227333 20070605
  DOCUMENT TYPE: CERTIFICATE OF CORRECTION
  CORRECTION DATE: 31 Jul 2007
## 19.7 Selected Fields

<table>
<thead>
<tr>
<th>IFICLS</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, UP, UPCD, UPRAI, UPSTA</td>
<td>AN UPCD, UPRAI, UPSTA</td>
<td>AN UPCD, UPRAI, UPSTA</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI</td>
<td>ADTX, CLM, DDTX</td>
<td></td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS), PAO</td>
<td>PA (CS), RAC</td>
<td>PA (CS), PAO</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PY, PN, PCS, PATS</td>
<td>PI PATS</td>
<td>PI PC, PD, PY, PN, PCS, PATS</td>
</tr>
<tr>
<td>Legal status</td>
<td>ADD, AND, CDAT, DDD, ADG, DDG, XPD, XTD, RQG, RIG, REG, RAA, RAC, RAD, RAK, RXD, RRD, RXN, RQD, RQN, RID, REX, RED, RRN</td>
<td>ADD, AND, CDAT, DDD, ADG, DDG, XPD, XTD, RQG, RIG, REG, RAA, RAC, RAD, RAK, RXD, RRD, RXN, RQD, RQN, RQR, RXR</td>
<td>ADD, AND, ADTX, CLM, CDAT, DDD, DDTX, ADG, DDG, XPD, XTD, RQG, RIG, REG, RAA, RAC, RAD, RAK, RXD, RRD, RXN, RQD, RQN, RQR, RXR, RID, REX, RED, RRN</td>
</tr>
<tr>
<td>Other</td>
<td>DT (TC), LA, FA</td>
<td>DT</td>
<td>DT</td>
</tr>
</tbody>
</table>

### 19.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>DS, FC, PC</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, FN</td>
</tr>
</tbody>
</table>
20 IMSPATENTS

20.1 Typical queries

- Legal status searches:
  - In which countries is the pharmaceutical Lacidipine protected?
  - What companies have got patent rights on this substance?
  - What are the expiry dates of these patents in the various countries?
- Searches using formal data (Numbers: publication, application), e.g.:
  - What substance is protected by patent no. SK 278 327? What is the legal status of this patent?

20.2 Brief description

Producer: IMS HEALTH (IMSworld Publications Ltd.), UK
Period covered: Since 1987
Size: More than 284,000 records (August 2014)
Updated: Monthly
Language: English

20.3 Contents

- Information on international patent families for over 3,000 chemical substances of important pharmaceutical products either already on the market or still under development. The database producer assigns the individual patents to families based on their contents.
- Product name, CAS Registry Number and chemical structure of each chemical substance, CAS Registry Number of derivatives, therapy class codes (including text), applications
- Publication and priority data of each individual patent
- Expiry date of the patent in the PI field
- The TX text field contains comments on the legal status in the respective country
- The Abstract contains comments on the patent family
- Current information on protection and expiry dates, comments on each individual patent, on other patents of the respective technical patent family and on other patent families relevant for the substance indexed, including Supplementary Protection Certificates (SPC) and Pediatric Extensions

20.4 Dynamics

The IMSPATENTS database follows the dynamic principle. Each record contains the data to identify the chemical substance and the publication data for one of the 90 covered countries (incl. EP, WO, cf. INPADOC). When a new publication on the same chemical substance is published

- by a different assignee (technical patent family)
- by the same assignee in a different country
- for additional inventions

a new record is entered into the database (mainly product patents, process patents are less important). The individual records are updated with new information on the term of protection or expiry (Extensions,
Supplementary Protection Certificates (SPC, Pediatric Extensions) and the patent family. For EP patents there is a record for each Designated State containing the expiry date.

The updated information includes the PI field (expiry date), comments on the legal status in the TX text field, comments on the patent family in the AB field and the identification details of the chemical substance.

20.5 Document from IMSPATENTS

Display format: ALL

AN 1998:6560  IMSPATENTS
DN 58910 (Country Drug Key)
FN 2076 (Drug Family Key)
SO Patents International, (20 Jul 2011)
OS IMSRESEARCH 1993:3178
ED Entered STN: 22 Jun 1998
Last Updated on STN: 26 Jul 2011
CN Generic Name: zoledronate; zoledronic acid
RE pINN
CN Lab Code: CGP 42446; ZOL 446
CN Trade Name: ACLASTA; RECLAST; ZOMETA
CN [1-hydroxy-2-[(1H-imidazol-1-yl)ethylidene]bisphosphonic acid
RN 118072-93-8
STR

Information to identify the active substance

RN Derivative(s): 118072-93-8 zoledronic acid
131654-46-1 disodium salt
131671-71-1 ion1
1. hydroxy-N,N-bis(hydroxymethyl)-N-methylme thanaminium
157432-58-1 zinc salt
157432-59-2 magnesium salt
CC L1X9 All Other Antineoplastics; M5B3 Bisphosphonates For Osteoporosis And Related Disorders; M5B4 Bisphosphonates For Tumour-related Calcium Disorders
CT Indication: breast cancer; cancer; fracture; hypercalcemia; metastasis; osteoporosis; Paget disease; solid tumor
Pharmacology: bisphosphonate; bone anabolic
HDP Marketed (80)
PA Ciba Geigy (Switzerland)
CO Novartis (Switzerland)
ST Product

Formal details of the patent application

<table>
<thead>
<tr>
<th>Publication Number</th>
<th>Patent Type</th>
<th>Publication Filing Date</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI</td>
<td>Application</td>
<td>19880727</td>
<td>20071116</td>
</tr>
<tr>
<td>EP 275821</td>
<td>Granted</td>
<td>19920226</td>
<td>20071116</td>
</tr>
<tr>
<td>DS Germany</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PRAI CH 1986-4666 19861121

TX: comments on the publication

The German patent office has assigned the number DE3776880 to EP0275821 B.
A supplementary protection certificate (SPC) for the ZOMETA formulation of zoledronic acid has been granted in Germany citing German patent DE3776880. The SPC expires on 16 November 2012.

A six month extension of the supplementary protection certificate (SPC) for pediatric use has been granted in Germany citing German patent DE3776880. The extended SPC expires on 16 May 2013.

Comments on the patent family

The patent family listed here claims zoledronic acid specifically and relates to the ZOMETA, ZOMETA CONCENTRATE, RECLAST and ACLASTA formulations of zoledronic acid.

The information on the active substance can be displayed in tabular form:

The following table was displayed for DE patents and EP patents having a DE designation on the substance ZOLEDRONATE (see above) in COTAB format:

<table>
<thead>
<tr>
<th>ANS</th>
<th>Patent Assignee</th>
<th>Compound</th>
<th>Publication Number(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ciba Geigy (Switzerland)</td>
<td>zoledronate</td>
<td>DE 270533</td>
</tr>
<tr>
<td>2</td>
<td>Novartis (Algeria)</td>
<td>zoledronate</td>
<td>EP 1591122</td>
</tr>
<tr>
<td>3</td>
<td>Novartis (Algeria)</td>
<td>zoledronate</td>
<td>EP 1296689</td>
</tr>
<tr>
<td>4</td>
<td>Boehringer Mannheim (Germany)</td>
<td>zoledronate</td>
<td>DE 264442</td>
</tr>
<tr>
<td>5</td>
<td>Boehringer Mannheim (Germany)</td>
<td>zoledronate</td>
<td>DE 3662058</td>
</tr>
<tr>
<td>6</td>
<td>Boehringer Mannheim (Germany)</td>
<td>zoledronate</td>
<td>EP 258618</td>
</tr>
<tr>
<td>7</td>
<td>Ciba Geigy (Switzerland)</td>
<td>zoledronate</td>
<td>EP 275821</td>
</tr>
</tbody>
</table>

Display in CYTAB format:

<table>
<thead>
<tr>
<th>ANS</th>
<th>Country</th>
<th>Publication Number(s)</th>
<th>Expiry Date</th>
<th>Expiry Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Germany</td>
<td>DE 270533</td>
<td>20051121</td>
<td>Granted (1989); (1), (2)</td>
</tr>
</tbody>
</table>
Guide to STN Patent Databases

2| Germany| EP 1591122 | 20210618 | Application | (3)
3| Germany| EP 1296689 | 20210618 | Granted | (4), (5)
5| Germany| DE 3626058 | 20060802 | Patent withdrawn | (8), (9)
6| Germany| EP 258618 | 20070725 | Patent granted | (10), (11), (12)
7| Germany| EP 275821 | 20071116 | Granted | (13), (14), (15), (16)

Country Comments:
(1) Country Comments: German patent DE270533 was originally filed in East Germany and claims a process for preparing zoledronic acid.
(2) German patent DE270533 lapsed in January 1997.
(3) Country Comments: EP1591122 A is a divisional of EP1296689 B and claims the use of zoledronic acid, its salt, or a hydrate for the treatment of conditions of abnormally increased bone turnover, comprising intermittently administering an effective amount of zoledronic acid, salt, or hydrate where the period between administrations is at least about six months.
(4) Country Comments: EP1296689 B is based on WO0197788 and claims the use of zoledronic acid, its salt, or a hydrate in the preparation of a medicament for the treatment of conditions of abnormally increased bone turnover, where the zoledronic acid, salt, or hydrate is administered intermittently and the period between administrations is at least about six months.
(5) The German patent office has assigned the number DE60113537 to EP1296689 B.
(6) Country Comments: German patent DE264442 was originally filed in East Germany and claims a process for preparing zoledronic acid.
(7) German patent DE264442 lapsed in June 2000.
(8) Country Comments: German application DE3626058 claims zoledronic acid generically.
(9) German application DE3626058 was withdrawn in August 1993.
(11) The German patent office has assigned the number DE3778800 to EP0258618 B.
(12) A supplementary protection certificate (SPC) for the ZOMETA formulation of zoledronic acid has been granted in Germany citing German patent DE3778800. The SPC expires on 25 July 2012.
(14) The German patent office has assigned the number DE3776880 to EP0275821 B.
(15) A supplementary protection certificate (SPC) for the ZOMETA formulation of zoledronic acid has been granted in Germany citing German patent DE3776880. The SPC expires on 16 November 2012.
(16) A six month extension of the supplementary protection certificate (SPC) for pediatric use has been granted in Germany citing German patent DE3776880. The extended SPC expires on 16 May 2013.

Display in PITAB format:

<table>
<thead>
<tr>
<th>ANS</th>
<th>Publication Number(s)</th>
<th>Publication Date</th>
<th>Filing Date</th>
<th>Expiry Date</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DE 270533</td>
<td>19890802</td>
<td>19871120</td>
<td>20051121</td>
<td>Germany</td>
</tr>
<tr>
<td>2</td>
<td>EP 1591122</td>
<td>20051102</td>
<td>20010618</td>
<td>20210618</td>
<td>Germany</td>
</tr>
<tr>
<td>3</td>
<td>EP 1296689</td>
<td>20030402</td>
<td>20010618</td>
<td>20210618</td>
<td>Germany</td>
</tr>
<tr>
<td>4</td>
<td>EP 1296689</td>
<td>20050921</td>
<td>20010618</td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td>5</td>
<td>DE 264442</td>
<td>19890201</td>
<td>19870730</td>
<td>20070731</td>
<td>Germany</td>
</tr>
</tbody>
</table>
### 20.6 Selected Fields

<table>
<thead>
<tr>
<th>Column</th>
<th>Column</th>
<th>Column</th>
<th>Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN</td>
<td>AN</td>
<td>AN</td>
</tr>
<tr>
<td>Contents information and Indexing</td>
<td>AN</td>
<td>CN, TN, CO, CC, CT, ST, TX, AB, RN</td>
<td>CN, TN, CO, CC, CT, ST, TX, AB, RN</td>
</tr>
<tr>
<td>Chemical structure</td>
<td>AN</td>
<td>CN, TN, CO, CC, CT, ST, TX, AB, RN</td>
<td>CN, TN, CO, CC, CT, ST, TX, AB, RN</td>
</tr>
<tr>
<td>Patent assignee/patent holder</td>
<td>STR, STF, STS</td>
<td>STR, STF, STS</td>
<td>STR, STF, STS</td>
</tr>
<tr>
<td>Priority data</td>
<td>PA, PAA</td>
<td>PA, PAA</td>
<td>PA, PAA</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRD, PRY</td>
<td>PRD, PRY</td>
<td>PRD, PRY</td>
</tr>
<tr>
<td>Application data</td>
<td>PRAI</td>
<td>APPS</td>
<td>APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AD, AY, APPS</td>
<td>AE, APPS</td>
<td>AE, APPS</td>
</tr>
<tr>
<td>Publication data</td>
<td>AC, AD, AY, APPS</td>
<td>AC, AD, AY, APPS</td>
<td>AC, AD, AY, APPS</td>
</tr>
<tr>
<td>Publication data</td>
<td>XPD, XPY</td>
<td>XPD, XPY</td>
<td>XPD, XPY</td>
</tr>
<tr>
<td>Expiry data</td>
<td>OS, SO, JT</td>
<td>OS, SO, JT</td>
<td>OS, SO, JT</td>
</tr>
<tr>
<td>Sources</td>
<td>DR, FN, HDP, STG, FA</td>
<td>DR, FN, HDP, STG, FA</td>
<td>DR, FN, HDP, STG, FA</td>
</tr>
</tbody>
</table>

#### 20.6.1 Super-Search-Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>PRN</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, DS</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN</td>
</tr>
</tbody>
</table>
21 INFULL

21.1 Typical queries

- Searches for the state of the art in India (text and classification), e.g.:
  - What IN applications are there on Driver Assistance Systems?
- Name searches (inventor, applicant), e.g.:
  - What IN applications by the Rubber Research Institute of India were published during the past year?
  - What IN applications are there by Mr Mehta Ajit Gopaldas of Mecords India Ltd?
- Searches using formal data (e.g. numbers), e.g.:
  - What is there in the text of the Indian Patent, IN 246306?
  - We are looking for Indian publications citing the priority country DE and having a priority year from 2005 to 2010 in the field of G06F 17/50 (Computer-aided design).
- Full-text display of Indian patents and applications:
  - What are the claims of the Indian Patent numbered IN 254953?
- Search by a numerical property in the full text of Indian patents:
  - Search by a nanometer length.
- Legal status display
- SDI searches for Indian patents and applications
- Using the full text to find material for an opposition
- Multi-file searches in combination with other national or regional patent databases

21.2 Brief description

Producer: LexisNexis Univentio B.V., Netherlands
Period covered: Since 1912
Size: More than 668,000 documentation units on patents, more than 389,000 full texts, more than 125,000 patent images (August 2014)
Updated: Weekly
Languages: English

21.3 Contents

- Full text from patent applications and granted patents published in India
- Bibliographical details, including patent applicant and inventor
- Title and Abstract are taken from the original document or from an equivalent, so are the description and claims; if not available in sufficient quality from the original they are taken from an equivalent, this is shown by DETD.EQ and CLM.EQ, respectively, in the FA (Field Availability) field
- International Patent Classification (IPC1-8), IPC thesaurus, range-searchable
- Cooperative Patent Classification (CPC), thesaurus
117

21.4 Dynamics

The INFULL database follows a mixed principle using segmentation. All publications of the same patent application form one documentation unit. Each document is entered into a separate record and will not be updated.

21.5 Updating

New data are entered into the database 1 week after the publication date.

21.6 Document from INFULL

Display format: ALL

INFULL COPYRIGHT 2013 LNU on STN.
AN 2011019599 INFULL ED 20130525 UP 20130525 EDTX 20130525
DED 20120817 DUPD 20130417
TI A COATING FOR PREPARING A GAS DIFFUSION LAYER AND A GAS DIFFUSION LAYER THEREOF
IN ALKEESH AHIRE; DR. NAVAL KISHOR MAL; DR. RAJIV KUMAR
PA TATA CHEMICALS LIMITED, BOMBAY HOUSE, 24 HOMI MODI STREET, MUMBAI-400001 Maharashtra India
LAF English
DT Patent; (Fulltext)
PI IN 2011MU00095 A 20120817
AI IN 2011-MU95 20110111
PRAI IN 2011-MU95 20110111
IPCI H01M0008-00 [C]

AB

Original

An electrode for a fuel cell is disclosed. The electrode comprises of a gas diffusion layer having an electrode catalyst layer coated thereon. The electrode catalyst layer comprises of a carbon supported catalyst. The carbon supported catalyst comprises of carbon supported platinum nanoparticles having at least one mercapto alkyl acid selected from the group comprising of mercaptopropyl sulfonic acid, mercapto propionic acid and mercapto succinic acid, attached thereon.

DETD

The disclosure generally relates to an electrode for a fuel cell. More particularly, the disclosure relates to an electrode comprising a gas diffusion layer having a catalyst layer coated thereon.

BACKGROUND Fuel cells are power generation systems that convert chemical energy into electrical energy by oxidation of fuel. Fuel cells have a higher efficiency compared to internal combustion engines and are environment friendly. Therefore, fuel cells have become the focus of attention for researchers as an alternative energy source for fossil fuels.

One type of electrochemical fuel cell is the polymer electrolyte membrane (PEM) fuel cell, which employs a membrane electrode assembly (MEA) comprising of a proton conductive membrane which has cathode catalyst layer on one side and anode catalyst layer on the other side, sandwiched between two gas diffusion layers. Gas diffusion layers serve as current collectors that allow ready access of the fuel and oxidant to
anode and cathode catalyst surfaces, respectively.

SUMMARY An electrode for a fuel cell is disclosed. The electrode comprises of a gas diffusion layer having an electrode catalyst layer coated thereon. The electrode catalyst layer comprises of a carbon supported catalyst. The carbon supported catalyst comprises of carbon supported platinum nanoparticles having at least one mercapto alkyl acid selected from the group comprising of mercapto propionic acid and mercapto succinic acid, attached thereon.

A membrane electrode assembly for a fuel cell is also disclosed. The membrane electrode assembly comprises of a cathode and an anode disposed on both surfaces of an electrolyte membrane. The anode and the cathode comprising the electrode as disclosed.

BRIEF DESCRIPTION OF DRAWINGS Figure 1: Polarization curve (V-I) and power density curve (P-I) of 0.10 milligrams Pt/Cm² loading on anode electrode catalyst measured using single cell.

Figure 2: Polarization curve (V-I) and power density curve (P-I) of 0.15 milligrams Pt/Cm² loading on anode electrode catalyst measured using single cell.

DETAILED DESCRIPTION To promote an understanding of the principles of the invention, reference will be made to the embodiment illustrated in the drawing and specific language will be used to describe the same. It will nevertheless be understood that no limitation of scope of the invention is thereby intended, such alterations and further modifications in the described method and such further applications of the principles of the inventions as illustrated therein being contemplated as would normally occur to one skilled in art to which the invention relates.

It will be understood by those skilled in the art that the foregoing general description and the following detailed description are exemplary and explanatory of the invention and are not intended to be restrictive thereof.

The present disclosure generally relates to an electrode for a fuel.

SPECIFIC EMBODIMENTS ARE DESCRIBED BELOW An electrode for a fuel cell comprising a gas diffusion layer having an electrode catalyst layer coated thereon, wherein the electrode catalyst layer comprises of a carbon supported catalyst, the carbon supported catalyst comprising carbon supported platinum nanoparticles having at least one mercapto alkyl acid selected from the group comprising of mercapto propionic acid and mercapto succinic acid, attached thereon.

Such electrode(s), wherein the carbon supported catalyst further comprises at least one alkyl thiol selected from the group comprising of hexane thiol, octane thiol, decane thiol and dodecane thiol attached to the platinum nanoparticles.

Such electrode(s), wherein the electrode catalyst layer further comprises a binder.

Such electrode(s), wherein the binder is selected from the group comprising of polytetrafluoroethylene, polyvinylidene fluoride-hexafluoropropene, polyvinyl fluoride, polyvinylidene fluoride, polyvinylidene fluoride, polyvinylidene fluoride, and Nation.

Such electrode(s), wherein the gas diffusion layer is selected from the group comprising of carbon cloth, carbon paper, carbon felt and teflon sheet.
Such electrode(s), wherein platinum comprises 0.05 - 5 milligrams/cm² of the electrode catalyst layer.

A membrane electrode assembly for a fuel cell comprising a cathode and an anode disposed on both surfaces of an electrolyte membrane, the anode and cathode comprising the electrode as disclosed.

INDUSTRIAL APPLICABILITY The electrode for a fuel cell described above is cost effective and highly efficient.

The said electrode can be used in fuel cell technology and other electrolysis applications.

The use of afore-described electron catalyst layer eliminates the use of nation as proton conductor and makes fuel cells more economical.

CLM

An electrode for a fuel cell comprising: a gas diffusion layer having an electrode catalyst layer coated thereon, wherein the electrode catalyst layer comprises of a carbon supported catalyst, the carbon supported catalyst comprising carbon supported platinum nanoparticles having at least one mercapto alkyl acid selected from the group comprising of mercaptopropyl sulfonic acid, mercapto propionic acid and mercapto succinic acid, attached thereon.

2. An electrode for a fuel cell as claimed in claim 1 wherein the carbon supported catalyst further comprises at least one alkyl thiol selected from the group comprising of hexane thiol, octane thiol, decane thiol and dodecane thiol attached to the platinum nanoparticles.

3. An electrode for a fuel cell as claimed in claim 1 or 2 wherein the electrode catalyst layer further comprises a binder. An electrode for a fuel cell as claimed in claim 3 wherein the binder is selected from the group comprising of polytetrafluoroethylene, polyvinylidene fluoridehexafluoropropene, polyvinyl fluoride, polyvinylidene fluoride, polyvinylidene fluoride, polychlorotrifluoroethylene, teflon sheet.

6. An electrode for a fuel cell as claimed in claim 1 or 2 wherein platinum comprises 0.05 - 5 milligrams/cm² of the electrode catalyst layer.

7. A membrane electrode assembly for a fuel cell comprising: a cathode and an anode disposed on both surfaces of an electrolyte membrane, the anode and cathode comprising the electrode according to any of claims 1 to 8.

8. An electrode substantially described herein with reference to and as described by the accompanying figures. Dated this day of January 11, 2011.

Essenese 0 Of Obhan & Associates
## 21.7 Selected fields

<table>
<thead>
<tr>
<th><strong>INFULL</strong></th>
<th><strong>SEARCH</strong></th>
<th><strong>DISPLAY</strong></th>
<th><strong>SELECT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, EDTX, UP DED, DUPD</td>
<td>AN ED, EDTX, UP DED, DUPD</td>
<td>AN ED, EDTX, UP DED, DUPD</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, Ti, AB CLM, MCLM</td>
<td>Ti AB (ABS); CLM, DETD, MCLM</td>
<td>Ti AB CLM, MCLM, DETD</td>
</tr>
<tr>
<td>Numerical properties</td>
<td>PHP*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Patent classification</td>
<td><strong>IPC8:</strong> IPC, IPC.KW, IPC.ACD, IPC.VER, IPCI, IPCR, IPC.REF <strong>IPC1-7:</strong> IC, ICM, ICS, ICA <strong>CPC:</strong> CPC, CPC.ACD, CPC.KW, CPC.VER <strong>Other:</strong> EPC, EPC.KW ICO, ICO.KW</td>
<td><strong>IPC8:</strong> IPC, IPC.TAB, IPCI, IPCR <strong>IPC1-7:</strong> IC, ICM, ICS <strong>CPC:</strong> CPC, CPC.TAB <strong>Other:</strong> EPC, ICO</td>
<td><strong>IPC8:</strong> IPC, IPCI, IPCR, IPC.REF, IPC.A, IPC.AI, IPC.F <strong>IPC1-7:</strong> IC, ICM, ICS <strong>CPC:</strong> CPC <strong>Other:</strong> EPC, ICO</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS), PA.CNY</td>
<td>PA (CS), PA.CNY</td>
<td>PA (CS), PA.CNY, PAA, PAN</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRDF, PRY, PRYF PRN, PRNO, APPS</td>
<td>PRN (PRAI) PRNO (PRAO)</td>
<td>PRC, PRD, PRDF, PRK, PRY</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AP APO, APPS</td>
<td>AI (AP), APO</td>
<td>AI (AP), AC, AD, AP</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PK, PK, P1N, PNK, PNO</td>
<td>PI (PN, PATS), P1T</td>
<td>PI (PN, PATS), PC, PD, PK, P1T</td>
</tr>
<tr>
<td>Related documents</td>
<td>RLC, RLD, RLY, RLN</td>
<td>RLI (RLN)</td>
<td>RLC, RLD, RLY, RLN</td>
</tr>
<tr>
<td>Legal status</td>
<td>LS, LS2, FAM, CFAM</td>
<td>LS, LS2</td>
<td>LS, LS2</td>
</tr>
<tr>
<td>Other</td>
<td>CLMN, DETN, DT, GIS, GIT, LA, LAF, FA</td>
<td>CLMN, DETN, DT, GIT, LA, LAF, FA</td>
<td>CLMN, DETN, DT, GIT, GIT, LA, LAF, FA</td>
</tr>
</tbody>
</table>

* Numeric properties: E A/PHP lists properties available for numeric search (cf. database description). The search is performed in all fields containing English text. There are no specific display fields, but the hit numeric values will be highlighted. For more information enter HELP NPS.

### 21.7.1 Super-Search-Fields

<table>
<thead>
<tr>
<th>Suchfeldname</th>
<th>Suchfeldcode</th>
<th>Felder, in denen gesucht wird</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
</tbody>
</table>
22 INPADOCCDB / INPAFAMDB

22.1 Typical queries

- Searches by number, name or classification to elicit the bibliographical details of documents, e.g.:
  - Who filed the application for the Mexican patent, MX 167961?
  - Has the European patent, EP 0 845 799, been granted yet?
  - What patents have Philips filed in Russia?
- Information searches, technology searches – mainly in INPAFAMDB (to some extent with long retrospect)
  - What publications are there on nano-biotechnology?
  - What publications on wind turbines have there been before 1970?
- Family searches, e.g.:
  - Are there any other members of a patent family of the US patent, 6,272,657? Have any of the applications in other countries lapsed?
  - Is there an equivalent in English or German (e.g. DE, US, EP) to the Japanese patent publication numbered JP 200329388?
- Display of the legal status, e.g.:
  - Is the European patent, EP 0 313 835, still in force in Great Britain?
- Patent statistics in INPAFAMDB or, for individual countries, in INPADOCCDB:
  - What can be said on the development of ultra-wide band radar in cars in the last eight years? Which focal points can be identified?
- Citation searches, e.g.:
  - Where is the US patent, 6,200,005, being cited?
- Patent monitoring, e.g.:
  - What patents by Motorola have been published since the database was last updated?
  - Was there any change in the legal status of the European Patent, EP 1 009 573, of Kennametal Inc., concerning an opposition filed since 14 November 2003?
  - Are there any changes in the patent family of EP 1 721 523?

22.2 Brief description

Producer: European Patent Office (EPO), Austria; FIZ Karlsruhe, Germany

Period covered: Since 1790

Size: More than 58.9 million records for patent applications, more than 11 million records for utility model applications; more than 42 million patent families (since 1970), more than 89 million legal status data (since 1978) more than 85 mliion citations (August 2014)

Updated: Weekly

Language: Language of the original or translation into English; legal status in English
22.3 Contents

- Publications in respect of national and international patent and utility model specifications (~95 national and regional patent offices, EPO, WIPO)
  (cf. survey "Country codes and country coverage of CA, INPADOCDB, DWPI")
- Database coverage before 1968: since 1836 (US), 1840 (GB), 1879 (DE), 1900 (FR), 1944 (JP)
- Bibliographical details
- International Patent Classification (IPC), online thesaurus incl. catchwords, range searching possible, re-classification of the back-file
- Patent family details
- Legal status details:
  - Entry of PCT applications into the national stage: AP, AT, AU, BG, BR, BY, BZ, CA, CH, CN, CZ, DE, EA, EG, ES, FI, GB, GE, HR, HU, IL, JP, KE, KR, LI (über CH), LT, LV, MD, MX, MY, NZ, PH, PL, RO, RU, SE, SI, SK, UA, US, UZ, WO, ZA
  - Non-entry of PCT applications into the national stage: CA, DE, JP, KR
  - European applications: application and grant are through the EPO, a few countries assign national application or publication numbers after grant: AT, CY, DE, ES, FR, IE, SM
  - Indication in EP legal status: “Corresponds To”, “Entry Into National Phase” or payment of annual fees: AT, BE, BG, CH, CZ, CY, DE, DK, EE, ES, FI, FR, GB, GR, HK, HU, IE, IL, IT, LI, LT, LU, LV, MC, MD, NL, PL, PT, RO, RU, SE, SI, SK, TR
  - SPCs (Supplementary Protection Certificates): AT, DE, ES, FI, FR, IT, LT, LU, NL, SK
  - Extensions of term (patents and utility models): AT, AU, CH, CN, CZ, DE, DK, FI, FR, GB, HU, IE, IL, JP, LT, NL, NO, RU, SE, SI, SK, US
  - Legal status details in original language
    - Start of coverage varies by country, new countries are constantly added

- Common Patent Classification (CPC), online thesaurus, range searchable;
- The European Classification (ECLA), ICO, and IDT are no longer available
- National US Classification with thesaurus (since 1836), Locarno Classification for US Design Patents (since 04/2005)
- Japanese FI- and FTERMS (from 1966) with thesaurus
- National Classifications: AT, AU, BR, CA, CH, DE, DK, ES, GB, MX, NL, SE
- Partly abstracts (32.5 million) from 50 countries since 1970: e.g. US, GB (from 1897), WO, EP, CA, DE, KR, J, JP, FR, CN; an English equivalent abstract ABEQ from the simple patent family is displayed in the ALL and MAX display formats if no English abstract is available for a given publication (since update week 200740)
- DOI links in non-patent literature citations
Patent databases on STN International

- INPAFAMDB: statistics of the patent family (number of applications, number of priorities, number of “EPO simple families”)
- INPAFAMDB: display of the PI patent family information plus hyperlinks to the full-text documents (PDF) in Espacenet (PI.PDF)

INPADOCDB is the most comprehensive patent database with regard to the countries covered. It corresponds to the Patent Family Service (PFS) and the legal status information of the Patent Register Service (PRS). The database is updated weekly with approx. 70,000 to 1,000,000 entries/uploads of the bibliographical PFS and approx. 40,000 to 180,000 legal status entries in the PRS. The EPO receives the data from the patent offices or patent organisations in electronic or paper form. The EPO tries to standardise the data, but relies on the quality of the data provided. The data are in the original language, but partly (e.g., for Russian or Japanese publications) an English translation (titles) and/or transliteration (Names) is given. (For some countries (in particular JP), published applications (code JP-A2) are often entered without details of title, assignee and inventor. As soon as such details are available, they are added to the record.)

Using the priority information, documents belonging to the same patent family can be grouped together in INPADOC. This is particularly useful to find out whether an equivalent to a known document exists in another country (e.g., because of possible infringements or for better accessibility of the language).

22.4 Dynamics

The INPADOCDB database follows the static principle using segmentation. All national publications of the same patent or utility model application form one documentation unit. If there is legal status information in a document unit, it will be updated regularly. Every document is assigned a family number, FN, corresponding to its patent family.

The INPAFAMDB database uses the dynamic principle. The INPADOCDB family number, FN, is used as the accession number AN of a (family) document in INPAFAMDB (AN = FN). The individual patent documents are merged into patent families anew with every update of the database, i.e., there is only one document in the database for every patent family.

22.5 Updating

New documents are entered into INPADOCDB and INPAFAMDB a few days (DE, EP, FR, GB) up to weeks (JP, US, WO) after publication.

22.6 Documents from INPADOCDB

Display format: MAXG (details of all national publications plus legal status)

Using the priority information, documents belonging to the same patent family can be grouped together in INPADOC. This is particularly useful to find out whether an equivalent to a known document exists in another country (e.g., because of possible infringements or for better accessibility of the language).
The invention relates to a construction for milking animals, such as cows, comprising a milking robot (8) for automatically milking animals. A movable collecting member (36) for the excrements of an animal present in the construction is arranged at the trailing side of the construction.
AN 23720717 INPADOCDB UP 20120705 UW 201227
FN 8584206
TI Vorrichtung zum automatischen Melken von Tieren.
A construction for automatically milking animals.
Dispositif de traite automatique d'animaux.
TL German; English; French
IN VAN DER LELY, CORNELIS
INS VAN DER LELY CORNELIS, CH
PA LELY ENTERPRISES AG
PAS LELY ENTPR AG, CH
DT Patent
PI EP 1029447 A8 20060607 English
PIT EPA8 MODIFIED FIRST PAGE
DAV 20060607 modified-first-page-pub
STA PRE-GRANT PUBLICATION
DS R: DE FR GB NL SE
AI EP 2000-201926 A 19941005
AIT EPA Patent application
NL 1993-1753 A 19930111 (NLA, 20070614, Y)
PRAIT EPA3 Prior application claimed for a division
NLA Patent application
IC V 7
ICM A01J 0005-017
ICS A01K0001-01
IPCR A01J 0005-017 [I,A]; A01K0001-12 [I,A]; A01K0023-00 [I,A]
CPC A01J 0005-0175; A01K0001-12; A01K0023-005
EPC A01J 0005-017A; A01K0001-12; A01K0023-00B
FA AI; AN; DAV; CHG; CPC; DS; DT; EPC; ICM; ICS; IN; INS; IPC; IPCR; LA; PA;
PAS; PI; PIT; PRAI; TI
CHG PRAI A; IPC A
AN 23720717 INPADOCDB UP 20120705 UW 201227
FN 8584206
TI Vorrichtung zum automatischen Melken von Tieren.
A construction for automatically milking animals.
Dispositif de traite automatique d'animaux.
TL German; English; French
IN VAN DER LELY, CORNELIS
INS VAN DER LELY CORNELIS, CH
PA LELY ENTERPRISES AG
PAS LELY ENTPR AG, CH
DT Patent
PI EP 1029447 A8 20060607 English
PIT EPA8 MODIFIED FIRST PAGE
DAV 20060607 modified-first-page-pub
STA PRE-GRANT PUBLICATION
DS R: DE FR GB NL SE
AI EP 2000-201926 A 19941005
AIT EPA Patent application
NL 1993-1753 A 19930111 (NLA, 20070614, Y)
PRAIT EPA3 Prior application claimed for a division
NLA Patent application
IC V 7
ICM A01J 0005-017
ICS A01K0001-01
IPCR A01J 0005-017 [I,A]; A01K0001-12 [I,A]; A01K0023-00 [I,A]
CPC A01J 0005-0175; A01K0001-12; A01K0023-005
EPC A01J 0005-017A; A01K0001-12; A01K0023-00B
FA AI; AN; DAV; CHG; CPC; DS; DT; EPC; ICM; ICS; IN; INS; IPC; IPCR; LA; PA;
PAS; PI; PIT; PRAI; TI
CHG PRAI A; IPC A
LEGAL STATUS

AN 23720717 INPADOCDB
20000823 EPAC DIVISIONAL APPLICATION (ART. 76) OF: EP 647390 P
20000823 EPAK + DESIGNATED CONTRACTING STATES:
                EP A2
DE FR GB NL SE
20010808 EPAK + DESIGNATED CONTRACTING STATES:
                EP A3
DE FR GB NL SE
20020123 EP17P + REQUEST FOR EXAMINATION FILED
                    20011126
EXA Examination, Search Report
20020502 EPPAX + PAYMENT OF DESIGNATION FEES
                    DE FR GB NL SE
20040303 EP17Q + FIRST EXAMINATION REPORT
                    20040116
EXA Examination, Search Report
20040324 EPRAP1 TRANSFER OF RIGHTS OF AN EP APPLICATION
                    MAASLAND N.V.
20050119 EPRAP1 + TRANSFER OF RIGHTS OF AN EP APPLICATION
                    LELY ENTERPRISES AG
20050304 EPEL + CHANGE OF OWNER, INVENTOR, APPLICANT
                    DE FR GB NL SE
20050331 EPDET DE: TRANSLATION OF PATENT CLAIMS
20060628 EPAC DIVISIONAL APPLICATION (ART. 76) OF: EP 0647390 P
20060628 EPAK + DESIGNATED CONTRACTING STATES:
                EP B1
DE FR GB NL SE
20060628 EPREF REFERENCE TO A NATIONAL CODE
                    GBFG4D + GB: EUROPEAN PATENT GRANTED
20060810 EPPREF + CORRESPONDING TO:
                    DE 69434780 P 20060810
20061003 EPREG REFERENCE TO A NATIONAL CODE
                    SETRGR + SE: TRANSLATION OF GRANTED EP PATENT
                    ............................................................... 20100312
20070216 EPET + FR: TRANSLATION FILED
                    ............................................................... 20070301
20070509 EP26 - OPPOSITION FILED
                    DE LAVAL HOLDING AB
                    20070327
ORE Opposition, Reexamination
............................................................... 20070510
20070702 EPNLRI NL: OPPOSITION HAS BEEN FILED WITH THE EPO
                    DE LAVAL HOLDING AB
ORE Opposition, Reexamination
............................................................... 20070816
20090909 EPR26 - OPPOSITION FILED (CORRECTION)
                    DE LAVAL HOLDING AB
                    20070327
ORE Opposition, Reexamination
............................................................... 20090910
20101124 EPR26 - OPPOSITION FILED (CORRECTION)
                    DE LAVAL HOLDING AB
                    20070327
ORE Opposition, Reexamination
............................................................... 20101126
20110131 EPPGFP + POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
                    FR: 20101105
                    Payment Year: 17
............................................................... 20110203
20110131 EPPGFP + POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE
                    NL: 20101024
                    Payment Year: 17
The LS (Legal Status) field contains the legal status information of the patent application. Every entry consists of the parts: Date of publication in the official gazette of the respective patent office (e.g. for the European Patent Office: EPO Bulletin), a code for the Status type, occasionally a code for the Type of priority or application and the Text. The Text gives information on the actual status or status change, the effective date (if applicable), the names of persons concerned (e.g. opponent) and the numbers of other patent publications concerned (e.g. in case of division or addition). Legal status categories combine all codes on a certain topic, e.g. ORE – Opposition, Reexamination. The parts of a legal status entry are searchable. The legal status can also be displayed in original language (LSO).

The complete international patent family is compiled using the priority data and can be displayed with predefined family formats.

Display format: FAM

PATENT FAMILY INFORMATION
AN 23720717 INPADOCDB

+-------------+ PRAI +-------------+ AI +-------------+ PI +-------------+
| | DE 1994-22280 U 19941005 | DE 1994-22280 U 19941005 |
| | NL 1993-1753 A 19931011 | NL 1993-1753 A 19931011 |

+-------------+ AI +-------------+ PI +-------------+
| DE 1994-69426379 A 19941005 | DE 69426379 D1 20010111 |
| DE 1994-69434780 A 19941005 | DE 69434780 T1 20010613 |
| DE 1994-22280 U 19941005 | DE 9422280 U1 19991007 |
| DE 2000-201926 A 19941015 | DE 00201926 T1 20050331 |
| EP 1029447 A8 20060607 |
Guide to STN Patent Databases

Display format: CFAM:

PATENT FAMILY INFORMATION
AN 23720717 INPADOCDB

+............ P |............ +
DE 69426379 D1 20010111
DE 69426379 T1 20010613
DE 69434780 D1 20060810
DE 69434780 T2 20070614
DE 9422280 U1 19991007
DE 00201926 T1 20050331
EP 1029447 A2 20000823
EP 1029447 A3 20010808
EP 1029447 A8 20060628
EP 647390 A2 19950412
EP 647390 A3 19950614
EP 647390 B1 20001206
NL 9301753 A 19950501

These family formats are available (it is recommended to use DISPLAY BROWSE; for a comprehensive list see the database description):

Family display at full price:

- All display fields and display formats with appended .F display the respective field for all family members, e.g. TI.F; in addition there are TIPI.F, PILS.F and BIBLS.F
- FAM: Table PRAI – AI, AI – PI
- FAM2: Table PRAI – PI, AI – PI
- CFAM: Condensed FAM, only PI of the FAM table
- CFAM2: Condensed FAM (PI – AI; PRAI)
- SFAM: see CFAM2, but sorted by the EPO “simple patent family”
- FAMLS: see CFAM2, plus a list of all legal status entries, sorted by legal status date LSD
- EFAM: Extended Patent Family Information, see FAM but the priority information is used as heading for the AI – PI tables
- FFAM: Full Family Format, MAX.M format (full bibliographical and legal status data) for all members of the patent family
- MFAM: Full Family Format with abstracts (if available)
- LFAM: Publication information (PI field) plus legal status information
- DFAM: Delimited Family Format, table of priority, application and publication information delimited for post-processing, SET LINELENGTH 110 is recommended
- IFAM: Indented Family format, display of: Ti; Table PI – AI, PRAI; IMAX.F (full format with legal status for all family members, indented field names), heading (country name, country code) for the display of IMAX.F
- TIPI.F: TI + LS for all family members
- PILS.F: PI + LS for all family members
- BIBLS.F: BIB + LS for all family members

2 priorities, 7 applications, 14 publications, (2 EPO simple families)
Patent databases on STN International

- CITN: RE + CGB for all family members
- Display formats for family SDI:
  - FFAMUP: Updated information in the bibliographic fields and/or legal status of a patent family
  - LFAMUP: PI (Publication Information) and LSUP (legal status changes) of a patent family
  - FFAMED: new publication levels/new members and/or legal status changes of a patent family
  - IFAMUP: indented FAM plus patent family table

Family displays at reduced price:
- FFAM.PC: FFAM for one publication country only (possible for all countries)
- FFAMUP.PC: FFAMUP for one publication country only (PC = AT AU BE CA CH DE DK EP ES FI FR GB GR IE IL IT JP KR HU NL NO RU SE US WO O)
- FFAMED.PC: FFAMED for one publication country only (PC = AT AU BE CA CH DE DK EP ES FI FR GB GR IE IL IT JP KR HU NL NO RU SE US WO)
- MFAM.PC: MFAM for one publication country only

22.7 Document from INPAFAMDB

Display format: BRIEF (Default, de-duplicated format – content that appears repeatedly in the patent family is displayed only once)

AN 8584206 INPAFAMDB UPFB 20070816 UWF 200827
TI Konstruktion zum automatischen Melken von Tieren.
- Vorrichtung zum automatischen Melken von Tieren.
- A construction for automatically milking animals.
- Dispositif de traite automatique d'animaux.
- Inrichting voor het automatisch melken van dieren.
INS VAN DER LELY CORNELIS, CH
PAS MAASLAND NV, NL
- LELY ENTPR AG, CH
- TEXAS INDUSTRIES INC, NL
- TEXAS INDUSTRIES INC, AN
- TEXAS INDUSTRIES INC
IPCI A01J0005-017 [I,A]; A01K0001-01 [I,A]
IPCR A01J0005-017 [I,A]; A01K0001-12 [I,A]; A01K0023-00 [I,A]
EPC A01J0005-017A; A01K0001-12; A01K0023-00B
AB [EP 1029447 A2]
The invention relates to a construction for milking animals, such as cows, comprising a milking robot (8) for automatically milking animals. A movable collecting member (36) for the excrements of an animal present in the construction is arranged at the trailing side of the construction.

PATENT FAMILY INFORMATION INPAFAMDB

+--------+ Publications +--------+ Applications +--------+
DE 69426379 D1 20010111 DE 1994-69426379 A 19941005
DE 69426379 TJ 20010613
DE 69434780 D1 20060810 DE 1994-69434780 A 19941005
DE 69434780 TJ 20070614
DE 9422280 U1 19991007 DE 1994-22280 U 19941005
DE 00201926 T1 20050311 DE 2000-201926 A 19941015
EP 1029447 A3 20010608
EP 1029447 A8 20060607
EP 1029447 B1 20060628
EP 647390 A3 19950614
EP 647390 B1 20001206
Guide to STN Patent Databases

NL 9301753           A 19950501     NL 1993-1753     A 19931011

+------------- Priorities +-------------+
EP 1994-202888   A  19941005
NL 1993-1753     A  19931011

2 priorities, 7 applications, 14 publications, (2 EPO simple families)

Display formats: The family formats from INPADOCDB are also available in INPAFAMDB.

De-duplicated formats: These exist to allow a quick survey of the patent family. Every content that appears repeatedly in the patent family is displayed only once. The default format in the database is the de-duplicated format BRIEF. This format displays the de-duplicated bibliographical details, a selected abstract and the family information (PI, AI, PRAI).

All display fields (TI, PA, IN, etc.) and the display formats (BIB, ALL, etc.) in INPAFAMDB relate to the patent family and have de-duplicated contents. More formats are described in chapter “Family search”.

22.8 When to use which database

<table>
<thead>
<tr>
<th>INPADOCDB</th>
<th>INPAFAMDB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject search, search for bibliographical details</td>
<td>Technology survey (contents of all applications in a patent family is combined in one document, allows to search across all these applications)</td>
</tr>
<tr>
<td>Search by application/publication</td>
<td>Overview of legal status of a patent family</td>
</tr>
<tr>
<td>Search for/display of legal status of individual applications</td>
<td>Overview by company/inventor</td>
</tr>
<tr>
<td>Monitoring applications</td>
<td>Search for new inventions/patent families</td>
</tr>
<tr>
<td>Family search</td>
<td></td>
</tr>
<tr>
<td>Family formats</td>
<td>Family formats</td>
</tr>
<tr>
<td>FSEARCH/FSORT to group a search result by patent family</td>
<td>FSEARCH/FSORT is not necessary!</td>
</tr>
<tr>
<td>Patent statistics</td>
<td>Based on invention (1 invention = 1 document)</td>
</tr>
<tr>
<td>Search and statistics by country</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>De-duplication in format BRIEF (Default) and other display fields</td>
</tr>
<tr>
<td></td>
<td>Multi-file Family SDI in combination with CAPLUS and WPI</td>
</tr>
<tr>
<td></td>
<td>Easy identification of the family in full-text searches</td>
</tr>
</tbody>
</table>
## 22.9 Selected Fields

<table>
<thead>
<tr>
<th><strong>INPADOCDB / INPAFAMDB</strong></th>
<th><strong>SEARCH</strong></th>
<th><strong>DISPLAY</strong></th>
<th><strong>SELECT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN, ED, EW, UP, UW, UPM, UPBB, UPCC, UPFA, UPFB, UPFC, UPFD, UPFE, UPFL, UPFP, EDP, EDP, EDF, UPLS, EDLS, EWLS</td>
<td>AN, ED, EW, UP, UW, UPALL,</td>
<td>ED, EW, UP, UW</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, TI, AB</td>
<td>TI, AB, ABDE, ABES, ABFR, ABOL</td>
<td>TI AB, ABDE, ABES, ABFR, ABOL</td>
</tr>
<tr>
<td>Patent classification</td>
<td><strong>IPCB</strong>: IPC, IPC.KW, IPC.ACD, IPC.VER, <strong>IPC1-7</strong>: IC, ICM, ICS, ICA, ICI, IC.VER, <strong>CPC</strong>: CPC, CPC.ACD, CPC.KW, CPC.VER</td>
<td><strong>IPCB</strong>: IPC, IPC.TAB, IPCI, IPCR</td>
<td><strong>IPCB</strong>: IPCIPCI, IPCR, IPC.A, IPC.AI, IPC.C, IPC.CI, IPC.TAB</td>
</tr>
<tr>
<td></td>
<td>Other: NCL, NCLM, NCLS, INCL, INCLM, INCLS, FCL, FTRM, LCL, OCL</td>
<td>Other: NCL, NCLM, NCLS, INCL, INCLM, INCLS, FCL, FTRM, LCL, OCL</td>
<td>Other: NCL, NCLM, NCLS, INCL, INCLM, INCLS, FCL, FTRM, LCL, OCL</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN, INS (AU), INA, IN.CNY</td>
<td>IN, INS (AU), INA, IN.CNY</td>
<td>IN, INS (AU), INA, IN.CNY</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS), PAS, PAA, PA.CNY</td>
<td>PA (CS), PAS, PAA, PA.CNY</td>
<td>PA (CS), PAS, PA.CNY</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRC.WO, PRCF, PRCF.WO, PRD, PRDF, PRY, PRYF, PRN, PRK</td>
<td>PRAI (PRN)</td>
<td>PRAI, PRC, PRC.WO, PRCF, PRCF.WO, PRD, PRDF, PRY, PRYF, PRN, PRAIT, PRK</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AC.WO, AD, AY, AP, AK, AIT, DS</td>
<td>AI, AC, AD, AY, AP, AK, AIT, DS</td>
<td>AI, AC, AD, AY, AP, AK, DS</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PY, PN, PK, PNK, PIT, FDT (PT), DF</td>
<td>PI, PIT, FDT (PT)</td>
<td>PI, PC, PD, PY, PN, PK, PIT</td>
</tr>
<tr>
<td>Legal status data</td>
<td>LSAG, LSBI, LSC, LSC2, LSCC, LSCI, LSCY, LSD, LSDF, LSDF.CY, LSDS, LSFT, LSIC, LSIN, LSICL, LSO, LSPA, LSPC, LSPD, LSPK, LSPMY, LSPN, LSPY, LSSPC, LSSPC.FD, LSSPC.XD, LSSPC.EX, LSXS.CY, LSXS.DT, XPD, XPY</td>
<td>LS, LS2, LSQ</td>
<td>LSAG, LSC, LSCC, LSD, LSFT, LSIC, LSIN, LSO, LSPA, LSPC, LSPD, LSPN, LSSPC, LSSPC.FD, LSSPC.XD, LSSPC.EX, XPD, YPD</td>
</tr>
<tr>
<td>Citations</td>
<td>REN, RPN (PN.D), REC, RCP (PC.D), RPK (PK.D), RPD (PD.D), RPY (PY.D), REXP, SRO, SRT, CAT, PAS.D, AP, AC, A.D, AK, D, PC, PN, G, PNC, G</td>
<td>RE, REN, REP, REC (RE.CNT)</td>
<td>REN, REP, RPN (PN.D), REC, RCP (PC.D), RPK (PK.D), RPD (PD.D), RPY (PY.D), REXP, SRO, PAS.D, REP, PNC, CNP, CITN, PICITN</td>
</tr>
<tr>
<td>Other</td>
<td>CHG, AL, DAV, DT, FA, CF, LA, LAF, STA, TL</td>
<td>CHG, DAV, DT, FA, GI, LA, LAF, STA, TL</td>
<td>CHG, DT, LA, LAF, TL</td>
</tr>
</tbody>
</table>
Guide to STN Patent Databases

Note: All display formats with appended .F are family display formats and will be billed as such. All other display fields in INPAFAMDB are de-duplicated (see above).

The display formats with appended .M refer to all publication levels

## 22.9.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>Inventor Group</td>
<td>INSS</td>
<td>IN, INS, LSIN</td>
</tr>
<tr>
<td>US National Classification</td>
<td>NCLALL</td>
<td>NCL, INCL</td>
</tr>
<tr>
<td>Patent Assignee Group</td>
<td>PASS</td>
<td>PA, PAS, LSPA</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, RPN</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, DS</td>
</tr>
</tbody>
</table>
23  JAPIO

23.1  Typical queries
- Searches on the state of the art in Japan (using text and classification), e.g.:
  - What patents have been applied for in Japan on the subject of Georadar?
- Searches using formal data (e.g. numbers, names), e.g.:
  - What does the Japanese patent, JP 10028400, contain?

23.2  Brief description
Producer: Japan Patent Information Organization (JAPIO), Japan
Period covered: From October 1976 to March 2013
04/1973 – 12/1997: supplementary documents from INPADOC
Size: Approx. 11.1 million records on patents
approx. 8.1 million patent images (August 2014)
Updated: Database closed – last update March 2013
Language: English

23.3  Contents
- Publications of JP patent applications (Kokai Tokkyo Koho)
- Bibliographical details, JAPIO classification, title, abstracts in English, names
- International Patent Classification IPC1–8, IPC thesaurus, range search possible, currently no re-classification of the back-file
- Patent drawings and formulae

The JAPIO database provides the most comprehensive access to Japanese unexamined patent applications (JP-A). JAPIO is based on ‘Patent Abstracts of Japan’ (PAJ). PAJ does not cover all unexamined patent applications (e.g. PCT applications designating Japan), thus documents from INPADOC covering the period from 04/1973 to 12/1997 were added. These do not have abstracts and some even miss an English title.

Abstracts are in English. The names of the inventors and assignees are given in Roman characters.
JAPIO does not contain records on publications relating to PCT applications entering the national phase (JP-T), published applications after examination (JP-B), or granted patents (JP-B1, JP-B2).

23.4  Dynamics
The JAPIO database follows the static principle, documents once entered are not updated. The database only contains publications of unexamined applications.

23.5  Updating
New publications are not added to JAPIO any longer.
23.6 Documents from JAPIO

23.6.1 PAJ data

Display format: ALLG

AN 2006-025595 JAPIO
TI VEHICLE DRIVING UNIT AND VEHICLE DRIVER
IN SHIMIZU HISAYA; KOWATARI TAKEHIKO; ONO KOSAKU; YAMAMOTO TATSUYUKI; INNAMI TOSHIYUKI
PA HITACHI LTD
PI JP 2006025595 A 20060126 Heisei
AI JP 2005-179018 (JP2005179018 Heisei) 20050620
PRAI JP 2005-179018 20050620
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2006
IPCI B60L0011-18 [I,A]; B60K0006-04 [I,A]; B60W0020-00 [I,A]; B60W0010-08 [I,A]; B60W0010-26 [I,A]; B60X0017-356 [I,A]; B60L0011-14 [I,A]; F16D0065-18 [I,A]; B60T0008-17 [I,A]; B60L0011-18 [I,C*]; B60K0006-00 [I,C*]; B60W0020-00 [I,C*]; B60W0010-08 [I,C*]; B60W0010-26 [I,C*]; B60X0017-34 [I,C*]; B60L0011-14 [I,C*]; F16D0065-18 [I,C*]; B60T0008-17 [I,C*]

AB PROBLEM TO BE SOLVED: To attain omission of a wire harnesses, such as a power cable, and improvement in power loss, in a vehicle driving system of an engine/motor hybrid type.

SOLUTION: Portions 1 of wheels are driven by an engine 3. Wheels 2, other than the wheels driven by the engine 3, are driven by a rotary electric machine 4. When a running load is large, such as at starting and going up a slope, the rotary electric machine 4 is driven as a motor for driving the wheels to assist an engine drive system. In driving a vehicle, there exists a driving region requiring no motor-driven assist, such as low/medium load running and at speed reduction. When such an assist is not required, the rotary electric machine is caused to function as a power generator, and mechanical energy from the wheels is converted into electrical energy. The rotary electric machine 4, an inverter 7, a capacitor 11 and a controller 18 are integrally formed as a unit, and is fitted to a differential gear 5.

COPYRIGHT: (C)2006, JPO & NCPI
23.6.2 INPADOC data

Display format: ALLG

AN 1997-331676 JAPIO
TI SWITCHING POWER SUPPLY PORTION FOR REDUCING HIGHER HARMONIC LOAD IN POWER SUPPLY
IN RAINHARUTO KEEGERU; JIYANNPOORU RUBUERU
PA DEUTSCHE THOMSON BRANDT GMBH
PI JP 09331676 A 19971222 Heisei
AI JP 1997-61587 (JP0961587 Heisei) 19970317
PRAI DE 1996-19610762 19960319
SO INPADOC
IC ICM H02M003-28
ICS H02M007-06

23.7 Selected Fields

<table>
<thead>
<tr>
<th>JAPIO</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, UP</td>
<td>AN ED</td>
<td>AN</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, TI CT</td>
<td>TI, CT, AB CT</td>
<td>AB, TI CT</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER; IPC1-7: IC, MGR, SGR ICM, ICS JPC CC</td>
<td>IPC8: IPC, IPC.TAB, IPCI, IPCR; IPC1-7: IC (IPC), ICM ICS JPC CC</td>
<td>IPC8: IPC, IPCI, IPCR, IPC.A, IPC.AI, IPC.C, IPC.CI, IPC.F; IPC1-7: IC (IPC), SCG, SCL, ICM, SCGM, SCLM, ICS, SCGS, SCLS, JPC CC</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN, AU</td>
<td>IN, AU</td>
<td>IN, AU</td>
</tr>
<tr>
<td>Patent assignee / patent holder</td>
<td>PA, CS, PAA, PAN, PAT</td>
<td>PA, CS</td>
<td>PA, CS</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRDF, PRN, PRY, PRYF, APPS</td>
<td>PRAI, PRN APPS</td>
<td>PRAI, PRC, PRD, PRDF, PRN, PRY, PRYF, APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AP, AY, APPS</td>
<td>AI, AP, APPS</td>
<td>AC, AD, AI, AP, APPS</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, PK, PN, PY, PATS</td>
<td>PI, PATS, PN</td>
<td>PC, PD, PI, PK, PN, PY, PATS</td>
</tr>
<tr>
<td>Sources</td>
<td>SO</td>
<td>SO</td>
<td>SO</td>
</tr>
<tr>
<td>Other</td>
<td>DT, FA, FS, GIS, GIT, LA</td>
<td>DT, FA, FS, GI, GIS, GIT, LA</td>
<td>DT, FA, FS, GIS, GIT, LA</td>
</tr>
</tbody>
</table>

23.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>International Patent Classification</td>
<td>IPC</td>
<td>ICM, ICS, ICA, ICI</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN</td>
</tr>
</tbody>
</table>
24 JPFULL

24.1 Typical queries

- Searches for the state of the art in Japan (text and classification), e.g.:
  - What JP applications are there on Battery Management in Hybrid Vehicles?
- Name searches (inventor, applicant), e.g.:
  - What JP applications by Toyota Motor Corp were published during the past year?
  - What JP applications are there by Mr Yamamoto Shingo of Toyota Motor Corp?
- Searches using formal data (e.g. numbers), e.g.:
  - What is there in the text of the Japanese utility model, JP 3179793?
  - We are looking for Japanese publications citing the priority country DE and having a priority year from 2005 to 2010 in the field of A61L 27 (Materials for prostheses).
- Full-text display of Japanese applications:
  - What are the claims of the JP publication numbered 2012213658?
- Search by a numerical property in the full text:
  - Search by a nanometer length.
- Legal status display
- SDI searches for Japanese applications
- Using the full text to find material for an opposition
- Multi-file searches in combination with other national or regional patent databases

24.2 Brief description

Producer: Questel, France
Period covered: Since 1964
Size: More than 4.8 million records on patents and utility models (August 2014)
Updated: Weekly
Language: English

24.3 Contents

- Full text from patent applications, granted patents and utility models published in Japan
- Bibliographical details, including patent applicant and inventor
- The title and abstract of published applications are first entered as machine translations or taken from equivalents available. They are replaced with human-translated texts within 3 months. The description and claims are machine-translated.
- Title, patent applicant and inventor can in addition be displayed in Japanese writing.
- International Patent Classification (IPCI-8), IPC thesaurus, range-searchable
- Cooperative Patent Classification (CPC), thesaurus
- European Patent Classification (ECLA), ECLA thesaurus, range-searchable, other European classifications: ICO, IDT, the codes are retained as historic data
Patent databases on STN International

- Legal status details are taken from INPADOCDB and can be displayed in the fields LS, LS2, FAM, and CFAM. The legal status is not searchable. Citations are also taken from INPADOCDB.
- Numerical values of more than 55 physical and chemical properties in all full-text fields
- Some of the texts are created using an Optical Character Recognition (OCR) software, i.e. there may be errors and omissions of text portions

24.4 Dynamics

The JP FULL database follows a mixed principle using segmentation. All publications of the same patent application form one documentation unit. Each document is entered into a separate record and will not be updated. The legal status in INPADOCDB is continuously updated.

24.5 Updating

New documents are entered into the database 10 days after publication.

24.6 Document from JP FULL

Display format: ALL

JP FULL  COPYRIGHT 2013 QUESTEL on STN.
AN 2008114975  JP FULL  ED 20130130 UP 20130204 EDTX 20121005
TIEN WIRELESS COMMUNICATION SYSTEM, WIRELESS BASE STATION, WIRELESS MOBILE TERMINAL EQUIPMENT, AND MULTI-SERVICE MANAGEMENT EQUIPMENT
TIAA 無線通信システム、
無線基地局装置、マル
チサービス管理装
置
INJA 福永 吉晃
長谷川 一
PA FUJITSU LTD
PAJA 富士通株式会社;
神奈川県川崎市中原
区上小田中4丁目1
番1号
PAN 5223
LAF Japanese
LA Japanese
DT Patent; [Full text]
PI JP 5115273B  B2 20130109
AI JP 2008-88393  200808328
PRAI JP 2008-88393  200808328
IPCI H04W0028-18 [I,A]; H04W0004-06 [I,A]; H04W0088-02 [I,A]
CPC H04W0072-005; H04W0028-16
EPC H04W0072-008

AB Equivalent

PROBLEM TO BE SOLVED: To improve MBMS service quality given to a mobile station by reporting the MBMS reception quality status of the mobile station to a wireless base station or an MCE (MBSFN control section) and controlling resource reallocation to the MBMS service.

SOLUTION: When a multi-service gateway 1 provides wireless mobile stations 110, 120 and 130 with MBMS services through wireless base stations 10 and 20, each of the wireless mobile stations evaluates the quality of the MBMS service by a multi-service quality evaluation section and reports a result to the wireless base station. The wireless base station transmits a report concerning the reception quality received from subordinate wireless mobile stations to a multi-service control section 2. The multi-service control section 2 collects reception quality information from the entire service areas of the MBMS service, and reallocates a resource and informs the wireless base
TECHNICAL FIELD. [0001] This invention regards the radio base station device and the multiple service management device which construct the radio communication system, and the particular system which do the multiple service which transmits the data of identical contents vis-a-vis the plural radio portable terminals.

CLM

1. The multiple service offer expedient which transmits the data of identical contents vis-a-vis the plural radio portable terminals and,

   The quality evaluation result collection expedient which collects the quality evaluation result of the aforementioned multiple service from the aforementioned plural radio portable terminals and,

   On the basis of the quality evaluation result every of aforementioned multiple service,

   modifying the band which is used for the aforementioned multiple service,

   the resource control means which control the distribution of the radio communication resource which you use for the aforementioned multiple service and,

   The radio communication system which features that it has.

6. Mean value of reception quality level is calculated from the quality evaluation result where the aforementioned quality evaluation result collection section collected, in the claim 5 which features that furthermore it has the decision section which decides whether or not modification of distribution of the aforementioned radio communication resource is executed with the comparison with the particular mean value and threshold the multiple service management device of statement.
### 24.7 Selected fields

<table>
<thead>
<tr>
<th>Suchfeldname</th>
<th>Suchfeldcode</th>
<th>Felder, in denen gesucht wird</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>Erfinder</td>
<td>IN (AU), IN.CNY</td>
<td>IN (AU), IN.CNY</td>
</tr>
<tr>
<td>Anmelder / Inhaber</td>
<td>PA (CS), PA.CNY, PAN</td>
<td>PA (CS), PA.CNY, PAN</td>
</tr>
<tr>
<td>Prioritätsangaben</td>
<td>PRC, PRD, PRDF, PRY, PRYF, PRN, PRNO, APPS</td>
<td>PRC, PRD, PRDF, PRK, PRY, PRYF, PRN (PRAI), PRNO, APPS</td>
</tr>
<tr>
<td>Angaben zur Anmeldung</td>
<td>AI (AP)</td>
<td>AI (AP), AC, AD, AY, AP, APPS, PCS</td>
</tr>
<tr>
<td>Angaben zur Publikation</td>
<td>PI (PN, PATS), PIT, PNO</td>
<td>PI (PN, PATS), PC, PD, PY, PK, PIT, PN, PNK, PNO</td>
</tr>
<tr>
<td>Dokumente mit einer rechtlichen Beziehung</td>
<td>RLC, RLD, RLY, RLN</td>
<td>RLC, RLD, RLY, RLN</td>
</tr>
<tr>
<td>Angaben zum Rechtsstand</td>
<td>LS, LS2, FAM, CFAM</td>
<td>LS, LS2</td>
</tr>
<tr>
<td>Sonstiges</td>
<td>CLMN, DETN, DT, LA, LAF, FA</td>
<td>CLMN, DETN, DT, LA, LAF, FA</td>
</tr>
</tbody>
</table>

* Numeric properties: E A/PHP lists properties available for numeric search (cf. database description). The search is performed in all fields containing English text. There are no specific display fields, but the hit numeric values will be highlighted. For more information enter HELP NPS.
Guide to STN Patent Databases

25 KOREAPAT

25.1 Typical queries

- Searches for the state of the art in Korea (text and classification), e.g.:
  - What inventions were made in Korea on Wind Power Generators?
- Name searches (inventor, applicant), e.g.:
  - What inventions of Samsung have been published in Korea during the past year?
  - What patent applications are there in Korea of Mr Richard Wells from Lucent Technologies?
- Searches using formal data (numbers: publication number, application number), e.g.:
  - What is contained in the Korean unexamined application numbered KR 2004024835?
  - Who is the owner of the granted patent numbered KR 368043?

25.2 Brief description

Producer: Korean Institute of Patent Information (KIPI), Seoul, Korea on behalf of the Korean Intellectual Property Office (KIPO)

Period covered: Since 1979

Size: More than 1.8 million records, more than 1.6 million patent images (August 2014)

Updated: Monthly

Languages: English

25.3 Contents

- Extracts from Korean granted patents from 1979 to 2001, extracts from unexamined Korean patent applications from 2000
- Granted patents after 2001 may be available if the application was not published
- Bibliographical details, title, names (inventor, applicant)
- International Patent Classification IPC1–8, IPC thesaurus, range search possible, currently no re-classification of the back-file
- Abstracts
- Patent drawing

25.4 Dynamics

The KOREAPAT database follows the static principle: either the unexamined application or the examined one is available. If documents were incomplete upon entry text fields will be added later.

25.5 Updating

The documents are entered into the database three months after publication.
25.6 Document from KOREAPAT

Display format: ALLG

AN  2007:033425  KOREAPAT  ED 20070723
TI  GAS BURNER WITH IGNITER IN WHICH ROTATING LEVER FOR SUPPLYING GAS TO
BURNER HEAD AND IGNITER SIMULTANEOUTLY OPERATE
TL  English
IN  PARK, MYUNG SUN
PA  PARK, MYUNG SUN
PIT  KRA Unexamined Patent Application
PI  KR 2007035550  A  200700330
AI  KR 2007-24141  20070312
PRAI  KR 2007-24141 *  20070312

IPC1  F24C0003-10 [I,A]; F23Q0003-00 [I,A];
F24C0003-00 [I,C*]; F23Q0003-00 [I,C*]

AB  PURPOSE: A gas burner with an igniting apparatus is provided to improve
user convenience by easily rotating a rotation lever through the use of a
guide ball.

CONSTITUTION: A gas burner comprises a burner head(10), an
opening/closing valve(20) for adjusting the amount of gas supplied to the
burner head, and an igniter(30) for igniting the burner head by being
operated simultaneously with the opening/closing valve. The igniter
includes a button lever(34) shaft-coupled onto a housing(31) of the
igniter so that the button lever is pressed to the same direction as a
rotating lever(22) while the opening/closing valve is closed. The igniter
includes a support lever(100) coupled to the lateral surface of the
housing so that the support lever is protruded in the same direction as
the rotating lever while the opening/closing valve is closed. The support
lever is arranged to be engaged with the rotating lever. The igniter has
a guide ball which partially contacts the button lever with respect to
the bottom surface of the rotating lever so that the rotating lever
smoothly rotates.

COPYRGT. KIPO 2007
25.7 Selected fields

<table>
<thead>
<tr>
<th>KOREAPAT</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN, ED, UP</td>
<td>AN, ED, UP</td>
<td>AN, ED, UP</td>
</tr>
<tr>
<td>Contents information</td>
<td>BL, TI, AB</td>
<td>TI, AB</td>
<td>TI, AB</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC&lt;sup&gt;8&lt;/sup&gt;: IPC, IPC.KW, IPC.ACD, IPC.VER; IPC1&lt;sup&gt;-7&lt;/sup&gt;: IC, MGR, SGR ICM, ICS</td>
<td>IPC&lt;sup&gt;8&lt;/sup&gt;: IPC, IPC.TAB, IPCI, IPCR; IPC1&lt;sup&gt;-7&lt;/sup&gt;: IC (IPC), ICM ICS</td>
<td>IPC&lt;sup&gt;8&lt;/sup&gt;: IPC, IPCI, IPCCR, IPC.A, IPC.AI, IPC.C, IPC.CI, IPC.F; IPC1&lt;sup&gt;-7&lt;/sup&gt;: IC (IPC), SCG, SCL, ICM, SCGM, SCLM, ICS, SCGS, SCLS,</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU)</td>
<td>IN</td>
<td>IN</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS)</td>
<td>PA (CS)</td>
<td>PA (CS)</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRY PRNO, PRT</td>
<td>PRNO APPS</td>
<td>PRAI (PRN) PRC, PRD, PRY PRN, PRT PRNO APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AC AD, AY AP APO APPS</td>
<td>AI, (AP) APO APPS</td>
<td>AC AD, AY AI, AP APO APPS</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC PD, PY PN (PATS) PNO PK, PIT</td>
<td>PI (PN, PATS), PIT PNO</td>
<td>PC, PD, PY PI, PN PNO PK, PIT</td>
</tr>
<tr>
<td>Other</td>
<td>DT, FA, GIS, GIT, TL</td>
<td>DT, FA, GI, GIS, GIT, TL</td>
<td>DT, FA, GI, GIS, GIT, TL</td>
</tr>
</tbody>
</table>

25.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>International Patent Classification</td>
<td>IPC</td>
<td>IPC, ICM, ICS</td>
</tr>
</tbody>
</table>
26 LITALERT

26.1 Brief description
Producer: Thomson Reuters (Professional) Ltd, UK
Period covered: Since 1973
Size: More than 73,000 records on patents,
      more than 61,000 records on trademarks (August 2014)
Updated: Weekly
Language: English

26.2 Contents
- Lawsuits on US Patents and US Trademarks
- Records for patent and trademark infringement lawsuits filed in the 94 US District Courts and reported to
  the Commissioner of the USPTO
- Records for lawsuits filed since the early 1970s that have never been reported in the Official Gazette
- Patent number, trademark registration number, issue date
- Title or trademark name, inventor, owner, assignee
- US classification (USCL): title and class number
- Descriptive information about the specific litigation: the court in which the action is taking place, the
docket number of the class, the plaintiffs and defendants, the filing date of the lawsuits; the judgement and
date, if applicable
- Sources: trademarks, patents, court cases

26.3 Dynamics
The LITALERT database follows the static principle. Documents are not updated.

26.4 Documents from LITALERT
Display format: IALL (Patent)

ACCESSION NUMBER: P2004-20-17 LITALERT
TITLE: Vehicle handle linear pull action
INVENTOR: Saffran Peter A - Windsor, CA; Abbott Glenn W -
West Bloomfield, MI; Kavanaugh James - Northville, MI
PATENT ASSIGNEE: DaimlerChrysler Corporation - Auburn Hills, MI; Siegel Robert, Inc. - St. Louis, MO
PATENT INF. PUBL. TYPE: Utility
RELATED PAT. INF.: none
RELATED TRADEMARK: none
PLAINTIFF: Siegel Robert Inc
DEFENDENT: ADAC Plastics Inc
COURT LOCATION: MI, Western Dist
DOCKET NUMBER: 1:04-cv-261
FILING DATE: 20040416
ACTION TAKEN: A complaint was filed
DOCUMENT TYPE: Patent
LANGUAGE: English
NOTE: none
CROSS REFERENCE: none
Guide to STN Patent Databases

FIELD AVAILABILITY: ACT; CTL; DF; FID; IN; NCL; NCLT; NUM; PA; PF; PI; RLI; RTM; TI
US PAT. CLASS. CODE: 495030000
US PAT. CLASS. RS: Movable or Removable Closures

Display format: IALL (Trademark)

ACCESSION NUMBER: T2003-45-66 LITALERT
TITLE: Viagra
OWNER: Pfizer Incorporated - New York NY
TRADEMARK NUMBER: 2162548 19960412 Registered
RELATED PAT. INF.: none
RELATED TRADEMARK: none
CLAIM: Pfizer Incorporated
DEFENDENT: Pharma Systems Incorporated; Simmons Robert
COURT LOCATION: CA, Central Dist.
DOCKET NUMBER: SACV03-7284 JFW PJWx
FILING DATE: 20031010
ACTION TAKEN: A complaint was filed.
DOCUMENT TYPE: Trademark
LANGUAGE: English
NOTE: none
CROSS REFERENCE: none
FIELD AVAILABILITY: ACT; CTL; DF; FID; NUM; O W; PF; RLI; RTM; TI; TMCC; TMCT; TMN
TRADEMARK CLASS CODE: 5
TRADEMARK CLASS TEXT: Pharmaceuticals

26.5 Selected fields

<table>
<thead>
<tr>
<th>LITALERT</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, UP</td>
<td>AN ED, UP</td>
<td>AN ED, UP</td>
</tr>
<tr>
<td>Contents information</td>
<td>Patents: BI, TI, ACT, NCTL, NTE, Trademarks: BI, TM, ACT, TMCC, TMCT</td>
<td>Ti, ACT, NCTL, NTE, TM, ACT, TMCC, TMCT</td>
<td>Ti, ACT, NTE, TM, TMCC, TMCT</td>
</tr>
<tr>
<td>Patent classification / Trademark class</td>
<td>Patents: NCL, NCLR, NCLT Trademarks: TMCC, TMCT</td>
<td>NCL, NCLT TMCC, TMCT</td>
<td>NCL, NCLT TMCC, TMCT</td>
</tr>
<tr>
<td>Inventor</td>
<td>Patents: IN (AU) IN.CTY, IN.CNY (IN.ST)</td>
<td>IN (AU), INA</td>
<td>IN (AU), IN.CTY, IN.CNY (IN.ST)</td>
</tr>
<tr>
<td>Owner/Assignee</td>
<td>Patents: PA (CS), PA.CTY, PA.CNY (PA.ST) Trademarks: OW, OW.CTY, OW.CNY (OWN.ST)</td>
<td>PA, PAA OW, OWA</td>
<td>PA (CS), PA.CTY, PA.CNY (PA.ST) OW, OW.CTY, OW.CNY (OWN.ST)</td>
</tr>
<tr>
<td>Publication data</td>
<td>Patents: PC, PD, PN, PY, PIT, PK, PATS</td>
<td>PI (PN), PIT PATS</td>
<td>PC, PD, PI (PN), PY, PK, PIT PATS</td>
</tr>
<tr>
<td>Registration data</td>
<td>Trademarks: RD, RY, TMN</td>
<td>TMN (includes legal status)</td>
<td>RD, RY, TMN</td>
</tr>
<tr>
<td>Related documents</td>
<td>Patents: RLPN, Trademarks: RTM</td>
<td>RLI RTM</td>
<td>RLC, RLPN, (RLU)</td>
</tr>
<tr>
<td>Legal status</td>
<td>Patents: NTE Trademarks: LS</td>
<td>NTE TMN</td>
<td>NTE LS</td>
</tr>
<tr>
<td>Lawsuit details</td>
<td>CTL, DF, NUM, FID, FIY, JD, JY, PF</td>
<td>CTL, DF, FID, FIY, JD, JY, NUM, PF</td>
<td>CTL, DF, NUM, FID, FIY, JD, JY, PF</td>
</tr>
<tr>
<td>Other</td>
<td>DT (TC), FA, LA, CR (XR)</td>
<td>DT (TC), FA, LA, CR (XR)</td>
<td>DT (TC), FA, LA, CR (XR)</td>
</tr>
</tbody>
</table>
27 PATDD

27.1 Typical queries
- State of the art searches / information searches / novelty searches (text and classification) in combination with other databases, e.g.:
  - What developments were there in East Germany concerning fibre-optic transmission?
- Name searches (inventor, assignee), e.g.:
  - What patents do Lausitzer Braunkohlen AG hold?
  - What patents were applied for by Professor Gerd Jäger?
- Search by formal data (numbers: publication, application), e.g.:
  - Who is the assignee of the patent, DD 301 749?

27.2 Brief description
Producer: Deutsches Patent- und Markenamt (DPMA), Germany
Period covered: 1981-2004
Size: 119,437 records
Updated: Closed database, last update: December 2004
Language: German

27.3 Contents
- Excerpts from patent publications published by the Patent Office of the former German Democratic Republic (previously Office for Inventions and Patents of the GDR) until October 2nd, 1990. Also included are excerpts from patents still granted according to the patent law of the former GDR, published in the Announcements of the German Patent Office (DPA) as from 3 October, 1990.
- Bibliographical details, abstracts and keywords

A number of GDR patents were evaluated for their economic importance. As a result of this, about 4,000 patents are available for use by interested parties. These can be recognized by the note ‘UNPA – Inhaberschaft zur Zeit unklar’ in the PA field in PATDD (see sample document below).

27.4 Dynamics
In the PATDD database, a static principle with segmentation is followed, i.e. a record in the database is maintained in its original form even if further publications are added at a later stage. For this purpose, segments are used: The first publication (codes DD-A1…A9, DD-AA…AH) is included into segment S1, possible further publications (codes DD-B1…B5, DD-C2…C5, even if more than one) into segment S2. This sequence of entries is valid irrespective of whether the first publication is already a fully examined publication or not (§§ 17 (1) and 18 (2) PatG GDR 1983).

<table>
<thead>
<tr>
<th>PATDD</th>
<th>DD-A1…DD-A9</th>
<th>DD-AA…DD-AH</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td>DD-B1…DD-B5</td>
<td>DD-C2…DD-C5</td>
</tr>
</tbody>
</table>

On account of this segmenting, special features must be considered for search and display. This applies to the use of the Boolean and proximity operators.
27.5 Updating
Publications still published under east German patent law are entered within four days. With regard to legal status information on GDR patents please refer to the patent register of the German Patent and Trademark Office.

27.6 Document from PATDD

Display format: ALL

DDAA DD·Aufgebot zur Akteneinsicht in Patentanmeldung
DDA9 DD·Offenlegungsschrift, 10.3 ErstrG
DBB5 DD·Patentschrift, Zweitpublikation gem. PatG i.V. mit ErstrG
AN 89·334524 PATDD UP 920709 EW 9228 FS S1
TI GLASIGES ODER GLASIG-KRISTALLINES MATERIAL MIT SCHNELLER LOESLICHKEIT UND VERFAHREN ZU SEINER HERSTELLUNG.
PA ANM.: AKADEMIE DER WISSENSCHAFTEN DER DDR
PAS AKAD WISSENSCHAFTEN DDR
PAA DE
DT Patent; Ausschliessungspatent; Aufgebot
LA Deutsch
PI DD 334524 AA 920507
PI DD 89·334524 A 891113
PRAI DD 89·334524 A 891113
IC ICM (5) C04B
FA Code Field Name


FA Code Field Name

INA Adresse des Erfinders
FORTSCHRIBUNG

AN 89:334524 PATDD UP 980712 EW 9828 FS S2
TI GLASIGES ODER GLASIG-KRISTALLINES MATERIAL MIT SCHNELLER LOESLICHKEIT UND VERFAHREN ZU SEIHER HERSTELLUNG.
IN BERGER, GEORG, DR. SC. TECHN., DE; SAUER, RENATE, DIPL. CHEM., DE; STEINBORN, GABRIELLE, DIPL. CHEM., DE; KNOEFLER, WOLFRAM, DR. MED., DE; GRAF, HANS-LUDWIG, DR. MED., DIPL. - STROMATOLOGE, DE; THI EmE, VOLKER, DOZ. DR. SC. MED., DE; DRESSEL, HORTING, DIPL. - ING., DE; GUENTHER, OLAF, DIPL. - CHEM., DE
INA DE
PA ANM.: BIOVISION GMBH ENTWICKLUNG, HERSTELLUNG UND VERTRIEB VON BIOMATERIALIEN, DE
UNIVERSITAT LEIPZIG, DE
FRIEDRICH-SCHILLER-UNIVERSITAET JENA, DE
PAS BIOVISION GMBH; UNIVERSITAET LEIPZIG; UNIVERSITAET JENA
PAA DE
DT Patent; Ausschliessungspatent
LA Deutsch
PI DD 302011 BS 980709
AI DD 89-334524 A 891113
PR AI DD 89-334524 A 891113
IC ICM (6) C03C004-00
ICS (6) C03C010-02; (6) C03C003-062; (6) A61L027-00; (6) A61F002-28; (6)
A61F002-30
FA Code Field Name
+---------------------------+
INA Adresse des Erfinders
PAA Adresse des Anmelders
ICS IPC Zweiklassifikation

27.7 Selected fields

<table>
<thead>
<tr>
<th>PATDD</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN</td>
<td>AN</td>
<td>AN</td>
</tr>
<tr>
<td></td>
<td>ED, EW, UP</td>
<td>ED, EW, UP</td>
<td>ED, EW, UP</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, TI</td>
<td>TI, AB</td>
<td>TI, AB</td>
</tr>
<tr>
<td>Indexing</td>
<td>ST, SW</td>
<td>ST</td>
<td>ST</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IC, IPC, MGR, SGR</td>
<td>IC, IPC</td>
<td>IPC, IC, SCG, SCL</td>
</tr>
<tr>
<td></td>
<td>ICM</td>
<td>ICM</td>
<td>ICM, SCGM, SCLM</td>
</tr>
<tr>
<td></td>
<td>ICS</td>
<td>ICS</td>
<td>ICS, SCGS, SCLS</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU), IN.S, IN.W, INA</td>
<td>IN (AU), INA</td>
<td>IN (AU), INA</td>
</tr>
<tr>
<td>Patent assignee / patent holder</td>
<td>PA (CS), PA.S, PA.W, PAS, PASS, PAS.W, PAA</td>
<td>PA (CS)</td>
<td>PA (CS)</td>
</tr>
<tr>
<td></td>
<td>PAS</td>
<td>PAS</td>
<td>PAS</td>
</tr>
<tr>
<td></td>
<td>PAA</td>
<td>PAA</td>
<td>PAA</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRAI</td>
<td>PRAI</td>
<td>PRAI</td>
</tr>
<tr>
<td></td>
<td>PRC</td>
<td>PRC</td>
<td>PRC</td>
</tr>
<tr>
<td></td>
<td>PRD, PRDF, PRMO, PRY, PRYF</td>
<td>PRD, PRDF, PRMO, PRY, PRYF</td>
<td>PRD, PRDF, PRMO, PRY, PRYF</td>
</tr>
<tr>
<td></td>
<td>PRN, PRK</td>
<td>PRN, PRK</td>
<td>PRN, PRK</td>
</tr>
<tr>
<td></td>
<td>APPS</td>
<td>APPS</td>
<td>APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AI</td>
<td>AI</td>
<td>AI</td>
</tr>
<tr>
<td></td>
<td>AC, AD, AMO, AY</td>
<td>AC, AD, AMO, AY</td>
<td>AC, AD, AMO, AY</td>
</tr>
<tr>
<td></td>
<td>AP, AK</td>
<td>AP, AK</td>
<td>AP, AK</td>
</tr>
<tr>
<td>Publication data</td>
<td>PI</td>
<td>PI</td>
<td>PI</td>
</tr>
<tr>
<td></td>
<td>PC, PD, PMO, PY</td>
<td>PC, PD, PMO, PY</td>
<td>PC, PD, PMO, PY</td>
</tr>
<tr>
<td></td>
<td>PN, PK, PIT</td>
<td>PN, PK, PIT</td>
<td>PN, PK, PIT</td>
</tr>
<tr>
<td></td>
<td>PATS</td>
<td>PATS</td>
<td>PATS</td>
</tr>
<tr>
<td>Related documents</td>
<td>RLI (RLN)</td>
<td>RLI (RLN)</td>
<td>RLI (RLN)</td>
</tr>
<tr>
<td></td>
<td>PATS</td>
<td>PATS</td>
<td>PATS</td>
</tr>
<tr>
<td>Other</td>
<td>DT, LA, FA, FS</td>
<td>DT, LA, FA, FS</td>
<td>DT, LA, FA</td>
</tr>
</tbody>
</table>
## 27.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search field name</th>
<th>Search code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Information</td>
<td>AI</td>
<td>AC, AD, AMO, AP, AY</td>
</tr>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>International Patent Classification</td>
<td>IPC</td>
<td>ICM, ICS, ICA, ICI</td>
</tr>
<tr>
<td>Patent Information</td>
<td>PI</td>
<td>PC, PD, PK, PMO, PN, PY</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, RLN</td>
</tr>
<tr>
<td>Priority Information</td>
<td>PRAI</td>
<td>PRC, PRD, PRDF, RPMO, PRN, PRY, PRYF</td>
</tr>
</tbody>
</table>
28 PATDPA

28.1 Typical queries

- Searches on the ‘state of the art’ in Germany (using text and classification searches), e.g.:
  - What applications have been filed in Germany in respect of brakes for inline skates?
- Name searches (inventor, applicant), e.g.:
  - What inventions from Jenoptik have been published in Germany over the last year?
  - What patents have been applied for by Mr Jozsef Bugovics in Germany?
- Searches using formal data (numbers: publication, application), e.g.:
  - What is contained in the patent numbered DE 197 22 778?
  - Who owns the patent numbered DE 197 01 766?
- Search for legal status
  - Is patent number DE 37 44 917 still in force?
  - Have Siemens AG offered the patent numbered DE 197 27 219 for use under licence?

28.2 Brief description

**Producer:** Deutsches Patent- und Markenamt (DPMA), Germany

**Period covered:** 1968-2011

**Size:** Approx. 6.9 million records of patents, approx. 687,000 records on utility models, approx. 757,000 patent images (June 2011)

**Updated:** Database closed – last update week 24/2011

**Language:** German

28.3 Contents

- Excerpts from unexamined and examined patent applications (‘Offenlegungsschriften’, ‘Auslegeschriften’), patents and utility models published by the German Patent and Trademark Office
- Excerpts from EP, PCT, and Euro-PCT publications (from 31st week 1998)
- Excerpts from EP, PCT, and Euro-PCT publications where Germany was named as designated state (from 1978)
- Translations of European patents granted, with amended claims, or corrected by the assignee, where the original application was in English or French
- Bibliographical details, title, names (inventor, assignee, agent)
- International Patent Classification IPC1–8, IPC thesaurus, range search possible, currently no re-classification of the back-file
- Patent drawings (or chemical formulae) from the first pages of German patent publications (from 1983)
- Data of citations and related patents
- Patent family information (DE, EP, WO; full coverage from July 1998)
- SPCs (Supplementary Protection Certificates) (from July 1998), not searchable
## Types of documents:

<table>
<thead>
<tr>
<th>Count (29.01.07)</th>
<th>Code (PK.M)</th>
<th>Years</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>247681</td>
<td>DEA</td>
<td>1968</td>
<td>DE document laid open (Offenlegungsschrift) (OS), until 1972</td>
</tr>
<tr>
<td>926751</td>
<td>DEA1</td>
<td>1968</td>
<td>DE document laid open (Offenlegungsschrift) (OS)</td>
</tr>
<tr>
<td>315</td>
<td>DEA8</td>
<td>2004</td>
<td>Corrected front page of a DE-A document</td>
</tr>
<tr>
<td>48564</td>
<td>DEB</td>
<td>1968</td>
<td>DE doc. laid open / Patent spec. (Auslegeschrift), 2nd publ. (AS)</td>
</tr>
<tr>
<td>1822</td>
<td>DEB1</td>
<td>1968</td>
<td>DE document laid open (Auslegeschrift), 1st publication (without OS)</td>
</tr>
<tr>
<td>22225</td>
<td>DEB2</td>
<td>1968</td>
<td>DE document laid open (Auslegeschrift), 2nd publication (after OS)</td>
</tr>
<tr>
<td>10925</td>
<td>DEB3</td>
<td>2004</td>
<td>DE patent specification (Patentschrift), (without OS)</td>
</tr>
<tr>
<td>47271</td>
<td>DEB4</td>
<td>2004</td>
<td>DE patent specification (after OS)</td>
</tr>
<tr>
<td>265</td>
<td>DEB8</td>
<td>2004</td>
<td>Corrected front page of a DE-B document</td>
</tr>
<tr>
<td>211</td>
<td>DEB9</td>
<td>2004</td>
<td>Complete reprint of a DE-B document</td>
</tr>
<tr>
<td>72966</td>
<td>DEC1</td>
<td>1968–2003</td>
<td>DE patent specification (Patentschrift), 1st publication. (no OS or AS)</td>
</tr>
<tr>
<td>350607</td>
<td>DEC2</td>
<td>1968–2003</td>
<td>DE patent specification (Patentschrift), 2nd publ. (after OS or AS)</td>
</tr>
<tr>
<td>188237</td>
<td>DEC3</td>
<td>1968–2003</td>
<td>DE patent specification (1st amendment after opposition or limitation)</td>
</tr>
<tr>
<td>10925</td>
<td>DEC4</td>
<td>1968–2003</td>
<td>DE patent specification (2nd amendment)</td>
</tr>
<tr>
<td>755</td>
<td>DEC5</td>
<td>2004</td>
<td>DE patent specification (modified)</td>
</tr>
<tr>
<td>1</td>
<td>DEC8</td>
<td>2004</td>
<td>Correction of a modified patent specification (front page)</td>
</tr>
<tr>
<td>1</td>
<td>DEC9</td>
<td>2004</td>
<td>Correction of a modified patent specification (whole document)</td>
</tr>
<tr>
<td>295450</td>
<td>DECE</td>
<td>1978</td>
<td>DE number for granted European patent with DE as designated state</td>
</tr>
<tr>
<td>8720</td>
<td>DET1</td>
<td>1978–2003</td>
<td>DE publication of the translation of the PCT application</td>
</tr>
<tr>
<td>1615</td>
<td>EPT1</td>
<td>1978</td>
<td>DE publication of the translated claims of an EP publication</td>
</tr>
<tr>
<td>345058</td>
<td>DET2</td>
<td>June 1992</td>
<td>DE publication of the translated EP patent specification</td>
</tr>
<tr>
<td>3881</td>
<td>DET3</td>
<td>June 1992</td>
<td>DE publication of the translation of the amended European patent specification in German</td>
</tr>
<tr>
<td>446</td>
<td>DET4</td>
<td>June 1992</td>
<td>DE publication of the corrected translation of the European patent specification</td>
</tr>
<tr>
<td>4501</td>
<td>DET5</td>
<td>2004</td>
<td>DE publication of the translation of the PCT application</td>
</tr>
<tr>
<td>533</td>
<td>DET8</td>
<td>2004</td>
<td>Corrected front page of a DE-T document</td>
</tr>
<tr>
<td>167</td>
<td>DET9</td>
<td>2004</td>
<td>Complete reprint of a DE-T document</td>
</tr>
<tr>
<td>622165</td>
<td>DEL1</td>
<td>1968</td>
<td>DE utility model (Gebrauchsmuster), publication in the ‘Patentblatt’</td>
</tr>
<tr>
<td>66</td>
<td>DEL8</td>
<td>2004</td>
<td>Corrected front page of a DE-U document</td>
</tr>
<tr>
<td>59</td>
<td>DEL9</td>
<td>2004</td>
<td>Complete reprint of a DE-U document</td>
</tr>
<tr>
<td>201199</td>
<td>EPA</td>
<td>1978</td>
<td>EP publication of the application open for public inspection</td>
</tr>
<tr>
<td>522417</td>
<td>EPA1</td>
<td>1978</td>
<td>EP publication of application with search report</td>
</tr>
<tr>
<td>155132</td>
<td>EPA2</td>
<td>1978</td>
<td>EP publication of application without search report</td>
</tr>
<tr>
<td>26150</td>
<td>EPA3</td>
<td>1978</td>
<td>EP publication of search report</td>
</tr>
<tr>
<td>803491</td>
<td>EBP1</td>
<td>1978</td>
<td>EP examined granted patent (after publication of A1 or A2)</td>
</tr>
<tr>
<td>7345</td>
<td>EBP2</td>
<td>1978</td>
<td>EP patent amended after opposition procedure</td>
</tr>
<tr>
<td>1575</td>
<td>EBP8</td>
<td>2001</td>
<td>Corrected front page of a EP-B document</td>
</tr>
<tr>
<td>1200</td>
<td>EBP9</td>
<td>2001</td>
<td>Complete reprint of a EP-B document</td>
</tr>
<tr>
<td>2523</td>
<td>WOA*</td>
<td>1978</td>
<td>WO publication of the PCT application</td>
</tr>
<tr>
<td>672618</td>
<td>WOA1*</td>
<td>1978</td>
<td>WO publication of the PCT application with intl. search report</td>
</tr>
<tr>
<td>59619</td>
<td>WOA2*</td>
<td>1978</td>
<td>WO publication of the PCT application without search report</td>
</tr>
<tr>
<td>182588</td>
<td>WOA3</td>
<td>1995</td>
<td>WO publication of the international search report</td>
</tr>
</tbody>
</table>

* WO applications in German after entering the national phase from 1978, WO applications before entering the national phase from July 1998
Abstract, main claim:

<table>
<thead>
<tr>
<th>Publication type</th>
<th>From week/year</th>
<th>Publication code</th>
<th>Text parts in German (apart from title)</th>
</tr>
</thead>
<tbody>
<tr>
<td>German utility models</td>
<td>39/1999</td>
<td>DE-U1/U8/U9</td>
<td>Main claim</td>
</tr>
<tr>
<td>German granted patents</td>
<td>1996</td>
<td>DE-C1/C2/C3/C4/C5/C8/C9, DE-B3/B4/B8/B9</td>
<td>In addition to the abstract the main claim is entered (but not retrospective)</td>
</tr>
<tr>
<td>German translations of WO applications</td>
<td>Up to 2003</td>
<td>DE-T1</td>
<td>–</td>
</tr>
<tr>
<td>DE publication of the translated claims of an EP publication</td>
<td>1978</td>
<td>EP-T1</td>
<td>–</td>
</tr>
<tr>
<td>German application number for EP patents with DE designation</td>
<td>1978</td>
<td>DE-CE</td>
<td>–</td>
</tr>
</tbody>
</table>

Some of the text information is entered with a delay (e.g. European abstracts). The UPAB field is available for SDI in these cases.

Up to 1998, the text parts were subjected to an automatic stemming process, the results of which are searchable (PASSAT terms, PST, not included in the Basic index).

The documents in the PATDPA database contain information on the status of the patent procedure and the legal status. For European (EP) patents, this is with respect to the status in Germany only before week 31/1998, and to both the status in Germany and of the European procedure after that date.

PATDPA also has data of related documents, such as divisional and additional applications (in the RLI field), and of patent documents and other literature cited (in the RE, REP, and REN fields).

28.4 Dynamics

The PATDPA database follows the dynamic principle, i.e. in case of a new publication or a change of the legal status the existing documentation unit in the database is changed. A documentation unit corresponds to one procedure at one of the three patent organisations (German office DPMA, EPO, WIPO), irrespective of the number of publications issued by that organisation during the procedures. For a patent family having members in DE, EP, and WO, three documentation units will exist in the database, one for each patent organisation.

A new record is introduced in the database at the first publication within a procedure and the data known at this time on the bibliographical details and legal status are entered. After this, a distinction is made between a new publication and a mere change of the legal status without a new publication.

The following table shows that corresponding fields exist, one of which is updated in the course of the procedure enabling a survey of the development so far. The other field is overwritten and shows the current data.
The PI field contains the data of the latest publication, while the PI.M field contains the data of all publications of this same procedure. The FI field holds the data of all publications of the patent family, including other German, EP, and WO publications.

This distinction of current and previous data can also be found in other fields, such as the patent assignee, inventor, and IPC. With the first publication, only the IN, PA, and ICM/ICS fields (IPC1–7) are set up and the data entered. Once a change occurs, the OLD fields are created and the data are taken from the current fields. Unlike the FI and NTE fields the OLD fields do not contain any current data.

Some the amendments to the field contents are displayed only in the MAX format or when the relevant fields (TI.M, PI.M) are specified in the DISPLAY format.

### 28.5 Updating
No updates from week 25/2011.

### 28.6 Document from PATDPA
Display format: MAXG

| AN | DE19824420 PATDPA | ED | 19991202 | EW | 199948 |
| SN | DE19824420.7 | DED | 20061130 | DEW | 200648 |
| UPS | 20061130 | weitere UP-Felder: HELP UPD |
| TI | (C2)(B4)(A1) Kraftfahrzeug mit einem Bildschirm |
| IN | Krause, Guenter (*DE 82194 Groebenzell) |
| PA | Krause, Guenter (*DE 82194 Groebenzell) |
| PAO | Bayerische Motoren Werke AG (*DE 80809 Muenchen) |
| PAN | 09900284 DE |
| PAT | (IND) Naturliche Person |
| EXF | 21 Landfahrzeuge |
| SO | DE-Patentblatt 126 (2006) Heft 22, DE B4 Patentschrift Textseiten 13; Blattzahl 9; Zeichnungsseiten 4 |
| DT | Patent |
| LA | Deutsch |
| NTE | 19980530: ADP (22) Anmeldetag d. DE-Patentanm. |
| | 19990530: FPRD (32) Erstes Prioritaetsdatum |
| | 19991202: AO (43) Offenlegungstag der DE-Anmeldung (OS) |
| | 19991202: SRN (56) Veroeff. d. Recherchenergebnisses auf DE-OS |
| | 20031002: NPA G127 Neuer Stand Anmelder |
| | 20050811: LiBA F120 Lizenzbereitschaft erklart (verbindlich) |
| | 20050901: SRP C107 Ermi ttl. d. Entgegenhaltungen nach Offenlegung |
| | 20060601: EX (43) Pruefungsantrag gestellt |
| | 20060601: PG (45) Veroeff.‐Tag der DE-Patenterteilung |
| | 20060601: SRP (56) Veroeff. d. Entgegenhaltungen auf DE-P5 |
| | 20061130: PGE0 I364 Einspruchfrist abgelaufen ohne Einspruch |
| PIT | PS EF DE-Patentschrift, 1. Veroeff., Einspr.-Frist 3 Mon. |
| | PS EF DE-Patentschrift, 2. Veroeff., Einspr.-Frist 3 Mon. |
| | OS DE Offenlegungsschrift, 1. Veroeff. |
| PITX | DEB4-475 PATENTSCHRIFT, (NORMAL) NEUES RECHT |
Patent databases on STN International

PI  DE 19824420  B4  20060601 PG  OP3  (10) 475 ( siehe PITX) 
DE 19824420  A1 19991120 AO  (10) 1. Publ. / DE-Schrift 
AI  DE 1998-19824420  A 19980530 ADP  (22) DE-Patentanmeldung 

FI  
FIA  DE 1998-19824420  A 19990530 AO  (43) DE-Offenlegung 
WO 1999-DE16846  A 19990328 ADW  (86) WO9962733 

FIP  DE 19824420  A1 19991202 AO  (43) DE-Offenlegung 
WO 1999-DE16846  A 19990328 ADW  (86) WO9962733 

RE  

REN (SRP)  J P Patent Abstracts of Japan: 07277037 A 
(SRP) 07069099 A 
(SRN)  J P Patent Abstracts of Japan: 07277037 A 
(SRN) 07069099 A 

IC  
ICM B60R0011-02  (511) IPC-Hauptklasse 
ICMO B60K0035-02  (512) vorherige IPC-HKL 
ICS B60K0037-02  (512) IPC-Nebenklasse 
ICSO B60K0035-00  (512) vorherige IPC-NKL 
ICA  G06F0019-00  (513) // IPC-Zusatzinform. 
IPCI B60R0011-02 [1,A]; B60R0011-02 [1,C*]; B60K0037-02 [1,A]; B60K0037-02 [1,C*] 

GIS  12772 

(C2)(A1) In einem Kraftfahrzeug ist das Lenkrad (1) an einem 
brückenartigen Träger (2) angeordnet, um einen Freiraum für einen 
vollwertigen Bildschirm (10) im Bereich hinter dem Lenkrad (1) zu 
schaffen. Der Träger (2) ist zu beiden Seiten des Bildschirmes (10) so 
gelagert, dass er nach oben in Richtung der Windschutzscheibe (4) 
verschwenkt werden kann, wodurch das Lenkrad (1) die Sicht auf den 
Bildschirm (10) freigibt. 

MCLM (B4) Kraftfahrzeug mit einem Bildschirm als Anzeigeeinheit für einen 
Rechner, dadurch gekennzeichnet, dass der Bildschirm (10) - bezogen auf 
die Blickrichtung eines Fahrzeuginsassen - hinter dem Lenkrad (1) des 
kraftfahrzeuges angeordnet ist und das Lenkrad (1) auf einem 
brückenförmigen Träger (2) angeordnet ist, der den Bildschirm (10) 
überspannt. 

FA  AE; GI; ICA; ICO; ICS; ICSO; INC; MCLM; PAO; REN; REP 
UP 200611130  Datum der letzten Fortschreibung 
UPPA 20031002  PA, letzte Fortschreibung 
UPOF 20031002  PA IN AG, letzte Fortschreibung
Guide to STN Patent Databases

UPOF 20061130 AI PI REN PRAI DS RLIC SO TI REP, letzte Fortschreibung
UPAB 20061130 AB, letzte Fortschreibung
UPAB 20060601 MCLM, letzte Fortschreibung
UPNT 19991202 ADP (NTE, Fortschr. historisiert)
UPNT 20050811 FPRD (NTE, Fortschr. historisiert)
UPNT 19991202 AO (NTE, Fortschr. historisiert)
UPNT 19991202 SRN (NTE, Fortschr. historisiert)
UPNT 20031002 NPA (NTE, Fortschr. historisiert)
UPNT 20050911 LIBA (NTE, Fortschr. historisiert)
UPNT 20050901 SRP (NTE, Fortschr. historisiert)
UPNT 20061130 EX (NTE, Fortschr. historisiert)
UPNT 20060601 PG (NTE, Fortschr. historisiert)
UPNT 20060601 SRP (NTE, Fortschr. historisiert)
UPNT 20061130 PGE0 (NTE, Fortschr. historisiert)

SPC (Supplementary Protection Certificate) Schutzzertifikat, display format: SPC

SPC Arzneimittel Zertifikat Erteilung
DE10075003.6 20000629 (DE69409360)
Pfizer Inc., 235 East 42nd Street, New York, N.Y. 10017; US
BGA: EU/2/99/014/001 25.11.1999
   EU/2/99/014/002 25.11.1999
   EU/2/99/014/003 25.11.1999
   EU/2/99/014/004 25.11.1999
   EU/2/99/014/005 25.11.1999
   EU/2/99/014/006 25.11.1999
Selamectin
IPC: C07H019-01
Laufzeit: bis 20141125
EEC-Verordnung
# 28.7 Selected fields

<table>
<thead>
<tr>
<th>PATDPA</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, EDAB, EW, DED, DEW, UP, UPAB, UPNT, UPOF, UPPA, UPS</td>
<td>AN ED, EDAB, EW, DED, DEW, UP, UPAB, UPNT, UPOF, UPPA, UPS</td>
<td>AN ED, EDAB, EW, DED, DEW, UP, UPAB, UPNT, UPOF, UPPA, UPS</td>
</tr>
<tr>
<td>Contents information</td>
<td>TI, TIEN, AB, MCLM, PST</td>
<td>TI, TIEN, AB, MCLM, PST</td>
<td>TI, TIEN, AB, MCLM, PST</td>
</tr>
<tr>
<td></td>
<td>ICM, ICMO</td>
<td>ICM, IC</td>
<td>ICM, SCG, SCLM, ICMO</td>
</tr>
<tr>
<td></td>
<td>ICS, IC80</td>
<td>ICI</td>
<td>ICS, SCGS, SCLS, IC80</td>
</tr>
<tr>
<td></td>
<td>ICA, ICI</td>
<td>NCL, CC</td>
<td>ICA, SCGA, SCLA, ICI</td>
</tr>
<tr>
<td></td>
<td>NCL, CC</td>
<td></td>
<td>NCL, CC</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN, INC, INO, INA</td>
<td>IN, INC, INO</td>
<td>IN, INC, INO, INA, IPC</td>
</tr>
<tr>
<td>Patent assignee / patent holder</td>
<td>PA (CS), PAC, PAO, PAS</td>
<td>PA (CS), PAC, PAO, PAS</td>
<td>PA (CS), PAC, PAO, PAS</td>
</tr>
<tr>
<td></td>
<td>PAA, PAN, PAT</td>
<td>PAA, PAN, PAT</td>
<td>PAA, PAN, PAT</td>
</tr>
<tr>
<td>Agent</td>
<td>AG, AGN</td>
<td>AG, AGN</td>
<td>AG, AGN</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRC, PRD, PRY</td>
<td>PRAI</td>
<td>PRAI</td>
</tr>
<tr>
<td></td>
<td>PRN, PRK, PRT</td>
<td>APPS</td>
<td>PRN, PRK, PRT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>APPS</td>
</tr>
<tr>
<td>Application data</td>
<td>AC AD, AY</td>
<td>AI, SN</td>
<td>AC AD, AY</td>
</tr>
<tr>
<td></td>
<td>AP, SN, AK, AT</td>
<td>DS</td>
<td>AI, AP, SN, AK, AT</td>
</tr>
<tr>
<td></td>
<td>AP, SN, AK, AT</td>
<td></td>
<td>DS</td>
</tr>
<tr>
<td></td>
<td>APPS</td>
<td></td>
<td>APPS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PCS</td>
<td>PI, PIT</td>
<td>PC, PCS</td>
</tr>
<tr>
<td></td>
<td>PD, PW, PY, PN, PK, PIT, PT</td>
<td>PSR</td>
<td>PD, PW, PY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PATS</td>
<td>Pi, PN, PK, PIT, PT</td>
</tr>
<tr>
<td></td>
<td>PATS</td>
<td></td>
<td>PSR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PATS</td>
</tr>
<tr>
<td>Family data</td>
<td>FAC, FAD, FAK, FAP, FAT, FAY</td>
<td>FIA</td>
<td>FIA, FAC, FAD, FAK, FAP, FAT, FAY</td>
</tr>
<tr>
<td></td>
<td>FN, FC, FD, FYFK, FPT</td>
<td>FI, FIP</td>
<td>FI, FIP, FC, FD, FN, FK, FPT, FYP</td>
</tr>
<tr>
<td></td>
<td>APPS, PATS</td>
<td>APPS, PATS</td>
<td>APPS, PATS, PATS</td>
</tr>
<tr>
<td>Related documents</td>
<td>RLC, RLD, RL, RLN, RLT</td>
<td>RLI</td>
<td>RLC, RLD, RLI, RLN, RLT</td>
</tr>
<tr>
<td>Request Group</td>
<td>APPS</td>
<td></td>
<td>APPS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citations</td>
<td>REN</td>
<td>RE, REN</td>
<td>REN</td>
</tr>
<tr>
<td></td>
<td>RPC, RPD</td>
<td>REP</td>
<td>RPC, RPD</td>
</tr>
<tr>
<td></td>
<td>RPN, RPK, RPT</td>
<td>PATS</td>
<td>RPN, RPK, RPT</td>
</tr>
<tr>
<td>Legal status data</td>
<td>NTE, NTD, NTL, NTDL OP</td>
<td>NTE</td>
<td>NTE, NTL</td>
</tr>
<tr>
<td>Patent countries</td>
<td></td>
<td>OP</td>
<td></td>
</tr>
<tr>
<td>Sources</td>
<td>OS</td>
<td>SO, OS</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>DT, LA, FA, GI</td>
<td>DT, LA, EXF, FA, GI, GI.H, GIS</td>
<td>DT, LA, EXF, FA, GI, GIS, SPC</td>
</tr>
</tbody>
</table>

Display formats with appended .M refer to all national publications.

## 28.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN, RLN, FAP</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, DS</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, FN, RPN</td>
</tr>
</tbody>
</table>
29 PATDPAFULL

29.1 Typical queries

- Searches for the state of the art in DE publications (text and classification), e.g.:
  - What German inventions are there on Neurofeedbacksysteme bei der Therapie von neuronalen Krankheiten (Neuro-feedback systems in the therapy of neural diseases)?
- Name searches (inventor, applicant), e.g.:
  - What inventions of ROLLS ROYCE have been published in Germany during the past year?
  - What patent applications are there in Germany of Mr Gerhard Schröder concerning furniture?
- Searches using formal data (numbers: publication number, application number), e.g.:
  - What is contained in the patent numbered DE 10 2004 012 732?
  - Are there any differences in the German patent, DE 103 53 485, compared to the publication of the application?
- Full-text display of German patents, patent applications and utility models:
  - What are the claims of the German application numbered DE 10 2004 018 950?
- Legal status display:
  - Is the patent numbered DE 101 41 506 in force?
- SDI searches for German patents
- Using the full-text to find material for an opposition
- Multi-file searches in combination with other national or regional patent databases

29.2 Brief description

Producer: Deutsches Patent- und Markenamt (DPMA), Germany
Period covered: Since 1987 (bibliographical data since 1981)
Size: More than 2.35 million records on patents (full texts), more than 521,000 records on utility models (full texts), more than 736,000 patent images (August 2014)
Updated: Weekly
Languages: German

29.3 Contents

- Full text from German patents and patent applications published by DPMA since 1987
- Translations of European Patents (T2, T3, T4) since 1993
- Claims of German utility model publications since 1999
- No documents of EP or WO applications
- Bibliographical details, title, names (inventor, applicant, agent)
- International Patent Classification IPC1–8, IPC thesaurus, range search possible, currently no re-classification of the back-file
- Details on citations, related documents
In addition to the full-text documents the bibliographical details of all DE documents since 1981 are available.

Drawings from front pages (if available) since 2004.

DE1T publications (German translation of WO applications in other languages than German) are not available in (ASCII) text format, this publication type is therefore not available in PATDPAFULL.

Legal status information from INPADOCDB can be displayed (LS, LS2, FAM and CFAM field) but is not searchable in PATDPAFULL.

29.4 Dynamics

The PATDPAFULL database follows a mixed principle using segmentation. Each document is entered into a separate record and will not be updated.

Records of T type documents contain the publication number of the EP document and in the case of Euro-PCT applications the WO number in the PI field.

29.5 Updating

New data are entered in the database 2...3 days after the DPMA publication date.

29.6 Document from PATDPAFULL

Display format: MAXG LS (both publication levels)

Publication open to public inspection (Offenlegungsschrift)

DE102004063909 PATDPAFULL ED 20051103 EW 200544

Schwimmhilfe als Weste

Antrag auf Nichtnennung (AANN)

Meissner, Joerg, 99326 Stadtilm, DE

DEA1 Offenlegungsschrift

DEA1-406 OFFENLEGUNGSSCHRIFT, 8-MONATS-AKTEN

DE 102004063909 A1 20051103

DE 2004-102004063909 A 20040322

DE 2004-102004063909 A 20040322

A63B0031-00

B63C0009-11


(Hauptanspruch auf der Titelseite, 00000001.tif)


... Aufgabe der Erfindung


[0010] Mit der Erfindung werden gewissermassen Unigroessen geschaffen,
das heisst durch die sehr grosse Variabilitaet der
Einstellmoeglichkeiten bei den Schwanmhilfen koennen je nach Ausfuehrung
bei Kindern z. B. die Groessen 92 bis 122 und bei Erwachsenen z. B. die
Groessen M bis XL mit einer Groesse der Schwimmhilfe abgedeckt werden.
Be Kindern "waechst" diese Schwimmhilfe so praktisch mit.

Beispiele

[0019] Die Erfindung wird im folgenden durch Ausfuehrungsbeispiele
naeher beschrieben.

[0020] In den Zeichnungen sind nicht einschraenkende Beispiele fuer die
Anwendung und Ausfuehrung von Schwimmhilfen gemaaess der Erfindung
dargestellt, wobei:

Bezugszeichenliste
10 Seitenlasche zur Anpassung an Koerpergroesse
11 Schulterlasche zur Anpassung des Armausschnittes
12 Absteppung
13 Aufhaenger
14 Reissverschluss
15 Seitenlasche mit Haken- Klettband
16 Schulterlasche mit Haken- Klettband
17 Seitenlasche mit Flausch- Klettband
18 Schulterlasche mit Flausch- Klettband
25 Reissverschluss sicherung

CLM 1. Schwimmhilfe als Weste ausgebildet, dadurch gekennzeichnet, dass die
Weste fuer variable Koerpergroessen einstellbar ist, wobei hierzu der
Hueftbereich mit einstellbarer wiederverschliessbarer Verschlusstechnik
z. B. Seitenlaschen mit Klettbaendern (10, 15, 17) versehen ist und zum
bequemeren und schnelleren An und Ausziehen ohne die exakte
Koerpergroessen einstellung der Schwimmhilfe zu veranderen ein
zusatzlicher wiederverschliessbarer Verschluss vorgesehen ist.

8. Schwimmhilfe nach Anspruch 1, dadurch gekennzeichnet, dass die Weste
Kammern aus Wasser- und luftdichtem Material aufweist, welche
luftbefuellt, gegebenenfalls in Kombination mit anderen schwimmfaehigen
Materialien, den Auftrieb gewaehrleisten.

Es folgen 3 Blatt Zeichnungen
Schwimmenlernern und zur Sicherheit am und im Wasser, im Zusammenhang verschiedener sportlicher und freizeitlicher Aktivitäten, getragen werden.

(Hauptspruch auf der Titelseite, 00000001.tif)

Würdigung Stand der Technik

[0001] Die Schwimmhilfe gemäß der Erfindung kann bei Kindern und gleichermassen bei Erwachsenen Anwendung finden.


Aufgabe der Erfindung


Beispiele

[0019] In den Zeichnungen sind nicht einschränkende Beispiele für die Anwendung und Ausführung von Schwimmhilfen gemäß der Erfindung dargestellt, wobei:

[0020] Fig. 1 und Fig. 2 eine westenförmige Schwimmhilfe für Kinder, wobei Fig. 1 die Ansicht von vorn und Fig. 2 die Ansicht von hinten gemäß der Erfindung zeigen. Bei dieser Darstellung ist die Schwimmhilfe aus Textilstoff genäht und mit geschlossenem Schaumplatten gefüllt. Bei dieser Ausführungsform sind alle Laschen aus Sicherheitsgründen nach hinten zu schließen und der Reissverschlussgriff ist mit einer Abdeckung gesichert.

Bezugszeichenliste

10 Seitenlasche zur Anpassung an Körpergröße
11 Schulterlasche zur Anpassung des Armausschnittes
12 Absteppung
13 Aufhaenger
14 Reissverschluss
15 Seitenlasche mit Haken- Klettband
16 Schulterlasche mit Haken- Klettband
17 Seitenlasche mit Flausch- Klettband
18 Schulterlasche mit Flausch- Klettband
25 Reissverschluss sicherung

1. Schwimmhilfe als Weste ausgebildet, dadurch gekennzeichnet, dass die Weste für variable Körpergrössen einstellbar ist, wobei hierzu der Hüftbereich mit einstellbarer wiederverschließbarer Verschlussstechnik z.B. Seitenlaschen mit Klettbandern (10, 15, 17) versehen ist und zum bequemeren und schnelleren An- und Ausziehen ohne die exakte Körpergrösseneinstellung der Schwimmhilfe zu verändern ein zusätzlicher Wiederverschließbarer Verschluss vorgesehen ist.

2. Schwimmhilfe nach Anspruch 1, dadurch gekennzeichnet, dass der Armausschnitt variabel einstellbar ist, wobei hierzu an dem Rückschleier und an dem Vorderteil im oberen Bereich ein einstellbarer Wiederverschließbarer Verschluss, z.B. Schulterlasche mit Klettband (11, 16, 18) vorgesehen ist.

159
8. Schwimmhilfe nach Anspruch 1, dadurch gekennzeichnet, dass die Kammern aus wasserd- und luftdichtem Material aufweist, welche luftbefüllt, gegebenenfalls in Kombination mit anderen schwimmfähigen Materialien, den Auftrieb gewährleisten.

Es folgen 3 Blatt Zeichnungen

---

Guide to STN Patent Databases

LEGAL STATUS INPADOCDB COPYRIGHT 2010 EPO / FIZ KARLSRUHE on STN
AN DE102004063909 PATDPAFULL
20040322 DEA PRI Patent application
DE 2004-102004063909 A 20040322
20040322 DEA3 PRI Prior application claimed for a division
DE 2004-102004014891 A3 20040322
20040322 DEA APP Patent application
DE 2004-102004063909 A 20040322
20051103 DEA1 PUB DOC. LAID OPEN (FIRST PUBLICATION)
DE 102004063909 A1 20051103
20051103 DEAC DIVIDED OUT OF
DE 102004014891 P
20051103 DEOP8 + REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW
EXA Examination, Search Report
20051208 DE8122 NONBINDING INTEREST IN GRANTING LICENSES DECLARED
LIC Licensing
20060119 DEB4 PUB PATENT (SECOND PUBLICATION)
DE 102004063909 B4 20060119
20060713 DE8364 + NO OPPOSITION DURING TERM OF OPPOSITION
### 29.7 Selected fields

<table>
<thead>
<tr>
<th>PATPDAPFULL</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN, ED, EW, UP</td>
<td>AN, ED, EW, UP</td>
<td>AN, ED, EW, UP</td>
</tr>
<tr>
<td>Contents information</td>
<td>TI, AB, CLM, MCLM</td>
<td>TI, AB, CLM, MCLM, DETD</td>
<td>TI, AB, CLM, MCLM, DETD</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER</td>
<td>IPC8: IPC, IPC.TAB, IPC.TAB.M, IPC, IPCR, I</td>
<td>IPC8: IPC, IPCI, IPCR, IPC.A, IPC.AI, IPC.C, IPC.CI, IPC.F</td>
</tr>
<tr>
<td></td>
<td>IPC1-7: IC, ICM, ICS, ICA, ICI, MGR, SGR</td>
<td>IPC1-7: IC (IPC), ICM, ICS, ICA, ICI</td>
<td>IPC1-7: IC, SCG, SCL, ICM, SCGM, SCLM, ICS, SCGS, SCLS, ICA, SCGA, SCLA, ICI</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN, INA</td>
<td>IN, INA</td>
<td>IN, IN.M, IN.A, INA.M</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS), PAA</td>
<td>PA (CS), PAA</td>
<td>PA (CS), PAA</td>
</tr>
<tr>
<td>Agent</td>
<td>AG</td>
<td>AG</td>
<td>AG</td>
</tr>
<tr>
<td>Priority data</td>
<td>APPS</td>
<td>PRAI</td>
<td>PRAI</td>
</tr>
<tr>
<td>Application data</td>
<td>APPS</td>
<td>PRAI</td>
<td>PRAI</td>
</tr>
<tr>
<td>Publication data</td>
<td>RLT</td>
<td>RLT</td>
<td>RLT</td>
</tr>
<tr>
<td>Related documents</td>
<td>APPS</td>
<td>APPS</td>
<td>APPS</td>
</tr>
<tr>
<td>Citations</td>
<td>APPS</td>
<td>APPS</td>
<td>APPS</td>
</tr>
<tr>
<td>Legal status</td>
<td>APPS</td>
<td>APPS</td>
<td>APPS</td>
</tr>
<tr>
<td>Other</td>
<td>CLMN, DETN, DT, LA, LAF, FA</td>
<td>CLMN, DETN, DT, LA, LAF, FA</td>
<td>CLMN, DETN, DT, LA, LAF, FA</td>
</tr>
</tbody>
</table>

Display formats with appended .M refer to all national publications.

### 29.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN, RLT</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, RPN</td>
</tr>
<tr>
<td>Short Basic Index</td>
<td>SBI</td>
<td>AB, TI, MCLM</td>
</tr>
</tbody>
</table>
30  PATDPASPC

30.1  Typical queries

- Searches for German Protection Certificates on substances, e.g.:
  - Is there a Protection Certificate in Germany on Latanoprost?
- Searches using formal data (patent number, SPC document number, and display of Certificate information), e.g.:
  - What Certificates are there for the patent DE 689 25 536 (translation of an EP patent).

30.2  Brief description

Producer: Deutsches Patent- und Markenamt (DPMA), Germany
Size: 1,248 SPC documents (August 2014)
Updated: Closed database, last update: Oct. 2013
Language: German

30.3  Contents

- German Supplementary Protection Certificates for Drugs and Plant protection agents (SPC)
  (Note: PATDPA also contains Certificates of European Patents)
- Granted, rejected, and withdrawn Certificates
- By substance, CAS Registry numbers
- SPC document number, publication and application details of the respective patent, SPC product type, SPC term, SPC application and grant details, chemical names, CAS Registry numbers of the substance and related substances, trade names, legal status notes
- International Patent Classification IPC1–8, IPC thesaurus, range search possible, no back-file re-classification
- Additional information may be found in PATDPA using the BIB2 (BIB, SPC) display format

30.4  Dynamics

PATDPASPC is a dynamic database. A separate document is created for every SPC document number. In case of any changes data in the document will be overwritten. New SPC documents or changes to existing documents are entered during a reload of the database. The reload date is displayed in the File Banner.

(Note: There may be more than one application for/grant of SPC for one patent number, i.e. several documents in the database.)

30.5  Updating

Updates of PATDPASPC are irregular. Details on the delay of updates cannot be given. It may be expected that PATDPA has more recent SPC details.
30.6  Documents from PATDPASPC

Display format: IALL

Accession Number              1130  PATDPASPC
SPC Document Number           DE 122006000021
SPC Product Type              medicinal
Hypothetical SPC Term         20100131-20150130
SPC Application Date           20060411
Examiners field               1.44

Patent Number                 DE 69033668
Patent Application Date       19900130
Int. Patent Classif.          C07K003-18 (5)
                             C07K001-22 (6)  
                             C07K001-22 (7)  
                             C07K0001-22 (8) [I, A]

Index Terms
Presumably Certified Compound(s)
  Chemical Name              24-163-fibroblast growth factor 7, human
  Chemical Name              24-163-keratinocyte growth factor, human
  Chemical Name              Palifermin aus Escherichia coli
  Chemical Name              Palifermin
  Chemical Name              human fibroblast growth factor-(24-163)-peptide

Trade Name(s)                 Kepivance Pulver zur Herstellung einer
                              Injektionsloesung

Legal Status
Approved Compound(s)          Palifermin aus Escherichia coli
SPC Requested Compound(s)      Palifermin

Display format: ALL

PI                              DE 69033668
AD                              19900130
IPC                             C07K003-18 (5)
                             C07K001-22 (6)
                             C07K001-22 (7)
                             C07K0001-22 (8) [I, A]

IT
Presumably Certified Compound(s)
  Chemical Name              24-163-fibroblast growth factor 7, human
  Chemical Name              24-163-keratinocyte growth factor, human
  Chemical Name              Palifermin aus Escherichia coli
  Chemical Name              Palifermin
  Chemical Name              human fibroblast growth factor-(24-163)-peptide
30.7 Selected fields

<table>
<thead>
<tr>
<th>PATDPASPC</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN, UP (ED)</td>
<td>AN, UP (ED)</td>
<td>AN, UP (ED)</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, TN</td>
<td>TN</td>
<td></td>
</tr>
<tr>
<td>Indexing</td>
<td>RN, RN.CEC, RN.OC, RN.PCC, CN, CN.CEC, CN.OC, CN.PCC, CNS IT</td>
<td>RN, CN IT</td>
<td>RN CN IT</td>
</tr>
<tr>
<td>SPC details</td>
<td>SPC.AD, SPC.AY, SPC.DN, SPC.GD, SPC.GY, SPC.GL, SPC.GSTD, SPC.HLD, SPC.HSTD, SPC.LD, SPC.TYP, SPC.STD</td>
<td>SPC</td>
<td>SPC.AD, SPC.AY, SPC.DN, SPC.GD, SPC.GY, SPC.GL, SPC.GSTD, SPC.HLD, SPC.HSTD, SPC.LD, SPC.STD</td>
</tr>
<tr>
<td>Legal status</td>
<td>LS, NTE, APP, GRA, REQ</td>
<td>LS</td>
<td>LS</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC (IC), IC.VER, IPC.KW, MGR</td>
<td>IPC (IC, ICM)</td>
<td>IPC (IC, ICM)</td>
</tr>
<tr>
<td>Application data</td>
<td>AD, AY</td>
<td>AD, AY</td>
<td>AD, AY</td>
</tr>
<tr>
<td>Publication data</td>
<td>PN</td>
<td>PI (PN)</td>
<td>PI (PN)</td>
</tr>
<tr>
<td>Other</td>
<td>FA</td>
<td>FA, EXF</td>
<td></td>
</tr>
</tbody>
</table>

30.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN</td>
</tr>
</tbody>
</table>
31 PCTFULL

31.1 Typical queries

- Searches for the state of the art in PCT publications (text and classification), e.g.:
  - What PCT applications are there on ski poles?
- Name searches (inventor, applicant), e.g.:
  - What PCT applications of Halliburton have been published during the past year?
  - What PCT applications are there of Mr Bertram Pitt?
- Searches using formal data (e.g. numbers), e.g.:
  - What is contained in the PCT application numbered WO 2004/112552?
  - We are looking for the full-text of an application of the company Sartorius of 11 June, 2004.
- Full-text display of PCT patents:
  - What are the claims made in the WO publication numbered 2001/010152?
- Display of legal status data
- Monitoring PCT applications
- Using the full-text to find material for an opposition
- Multi-file searches in combination with other national or regional patent databases

31.2 Brief description

Producer: LexisNexis Univentio B.V., Netherlands
Period covered: Since 1978
Size: More than 2.5 million records on PCT applications, more than 2.5 million full texts, more than 1.9 million patent images (August 2014)
Updated: Weekly
Languages: English, French, German, Spanish

31.3 Contents

- Full-text of published PCT applications published by the WIPO (currently 186 member countries)
- Bibliographical details
- Title in English and French, for documents in German or Spanish a title in the respective language is provided
- Numeric values of over 30 physical and chemical properties in almost 400 units
- International Patent Classification, IPC1–8, IPC thesaurus, range searching is possible, re-classification of the back-file
- Cooperative Patent Classification (CPC), thesaurus, range-searchable
- European Patent Classification (ECLA), thesaurus, range-searchable; other European classifications: ICO, IDT, the codes are retained as historical data
- The international (W) and regional (RW) designations are shown in the Designated States DS field. The designating institutions are listed for regional (RW) designations:
Guide to STN Patent Databases

- EPO: European Patent Office
- ARIPO: African Regional Intellectual Property Organisation
- EAPO: Eurasian Patent Convention
- OAPI: African Organization of Intellectual Property

Designations for Patents and Utility Models (German, Austrian, etc.) are listed separately.

- Priority application numbers are not standardized in the PRN field.
- Legal status information from INPADOCDB can be displayed (LS, LS2, FAM and CFAM field) but is not searchable in PCTFULL.
- Drawings from the first page of the publication.
- The text fields are generally available in one of the official WIPO languages (English, French, Spanish, German, Russian, Japanese, Chinese, Korean). Some texts are available in other languages (Italian, Finnish, Portuguese).
- English machine translations of the Title, Abstract, Description and Claims are available for the following languages: French, Spanish/Castilian, German, Russian, Japanese, Chinese, and Korean. Documents in certain filing languages contain the Patent Assignees, Inventors, Legal Representatives (names and partly addresses) for display both in the original language and in an English transliteration (e.g. from Russian, Chinese, Korean, Japane).
- Certain characters from the original languages (e.g. accents, umlauts, Cyrillic or Asian characters) are displayed in the respective “Original Language” fields. The ‘Field Availability Index’ field contains information on the availability of names (Patent Assignee, Inventor, Legal Representative) and text fields (Titles, Abstracts, Description, Claims in the various languages).
- All texts are created by Optical Character Recognition (OCR) software. This means that there may be errors and incomplete text. Some of the documents do not have text because the scanning failed.

31.4 Dynamics

The PCTFULL database follows the static principle; documents once entered are not updated.

31.5 Updating

Publications appear in PCTFULL approx. 1 to 2 weeks after the date of publication.

31.6 Document from PCTFULL

Display format: MAXG LS (Line length 101)

AN 2006061274  PCTFULL  ED 20101203  UP 20101203  EDTX 20101203  DUPD 20100929
TIEN CHIP MODULE AND METHOD FOR THE PRODUCTION THEREOF
TIFR MODULE DE PUCE ET SON PROCEDE DE PRODUCTION
TIDE CHIPMODUL UND VERFAHREN ZU DESSEN HERSTELLUNG
IN LUDWIG, Ronny, Kastanienweg 38, 72770 Reutlingen, DE, [NAT: DE, RES: DE], for US only;
LUDWIG, RONNY, DE, [NAT: DE, RES: DE], for US only
PA ROBERT BOSCH GMBH, Postfach 30 02 20, 70442 Stuttgart, DE, [NAT: DE, RES: DE], for all designated states except US;
ROBERT BOSCH GMBH, [NAT: DE, RES: DE], for all designated states except US;
ROBERT BOSCH GMBH, Postfach 30 02 20, 70442 Stuttgart, DE
AG ROBERT BOSCH GMBH, Postfach 30 02 20, 70442 Stuttgart, DE
LA German
DT Patent: (Full text)
PI WO 2006061274 A1 20060615
The invention relates to a chip module, particularly for optical and stress-sensitive measurements, comprising at least the following: a premold housing (1) consisting of a housing body (10) which is made of a plastic or epoxy resin material and provided with a housing edge (16) and a housing bottom (15), and at least one chip (26, 28, 30a, b), which is fastened and kontakt pads (44) exhibits, which with the Bondpads (20) the leads (5) over itself is contacted by the interior (17) of the Premoldgehause (1) extending wire bonds (46).

DE 
1. Chip module according to requirement 1, by the fact characterized that the Premoldgehause (1) mount by a Surface technology - procedure can be mounted.

DE 
[0001] Chipmodul und Verfahren zu dessen Herstellung
Die Erfindung betrifft ein Chipmodul mit einem mikromechanisch strukturierten Sensorelement für optische oder stressempfindliche Messungen, das insbesondere im Automotive-Bereich verwendbar ist, sowie ein Verfahren zu dessen Herstellung.

Derartige Chipmodule können insbesondere Gassensормodule mit Sensorchips zur Detektion von CO2 sein, die z. B. in CO2-betriebenen KfZ-Klimaanlagen zur Detektion von Leckagen verwendet werden.

1. Chipmodul, insbesondere für optische oder stressempfindliche Anwendungen, das mindestens aufweist: ein Premoldgehäuse (1), das einen aus einem Kunststoff oder Epoxidharz Material gefertigten Gehäusekörper (10) mit einem Gehäuserand (16) und einem Gehäuseboden (15) und einen in den Gehäusekoerper (10) eingespritzten Leadframe (14) mit mehreren Leads (5) aufweist, die sich durch den Gehäusekoerper (10) erstrecken und derartig gebogen sind, dass sie jeweils im Innenraum (17) des Premoldgehaeuses (1) in Bondpads (20) und auf der Unterseite (15a) des Gehäusebodens (15) in Ball-Pads (6, 7) freiliegen, und mindestens einen Chip (26, 28, 30a, b), der in dem Premoldgehaeuse (1) befestigt ist und Kontaktpads (44) aufweist, die mit dem Bondpads (20) der Leads (5) über sich durch den Innenraum (17) des Premoldgehaeuses (1) erstreckende Drahtbonds (46) kontaktiert sind.

2. Chipmodul nach Anspruch 1, dadurch gekennzeichnet, dass das Premoldgehaeuse (1) durch ein Surface mount technology-Verfahren montierbar ist.

LEGAL STATUS INPADOCDB COPYRIGHT 2011 EPO / FIZ KARLSRUHE on STN
AN - 2006061274 PCTFULL
20041207 DEA PRI Patent application
DE 2004-102004058815 A 20041207
20051012 WOW APP International application Number
20060615 WOA1 PUB INTERNATIONAL APPLICATION PUBLISHED WITH INTERNATIONAL SEARCH REPORT
WO 2006061274 A1 20060615
20060615 WOAK + DESIGNATED STATES
WO A1
20060615 WOAL + DESIGNATED COUNTRIES FOR REGIONAL PATENTS
WO A1
GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW AM AZ BY KG KZ MD RU TJ TM AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS LT LU LV MC NL N P PL PT RO SE SI SK TR BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
20060802 WO121 EP: THE EPO HAS BEEN INFORMED BY WIPO THAT EP WAS DESIGNATED IN THIS APPLICATION
20080102 WO122 - EP: PCT APP. NOT ENT. EUROP. PHASE
EP 05791978 A1

168
### 31.7 Selected fields

<table>
<thead>
<tr>
<th>Accession number and update codes</th>
<th>PCTFULL</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN, ED, EW, UP UW, DED</td>
<td>AN</td>
<td>ED, EW, UP UW, DED</td>
<td>AN</td>
<td>ED, EW, UP UW, DED</td>
</tr>
</tbody>
</table>

| Contents information | BI, TIEN, TIDE, TIFR, TIES, TIOI, AB, ABEN, ABFR, ABDE, ABES, ABOL, DETD, DETDEN, DETDDE, DETDES, DETDFR, DETDOL, DETDOR, CLM, CLEN, CLMFR, CLMDE, CLMES, CLMOL, MCLM, MCLEN, MCLMFR, MCLMDE, MCLMES, MCLMOL | BI, TIEN, TIDE, TIFR, TIES, TIOI, AB, ABEN, ABFR, ABDE, ABES, ABOL, DETD, DETDEN, DETDDE, DETDES, DETDFR, DETDOL, DETDOR, CLM, CLEN, CLMFR, CLMDE, CLMES, CLMOL, MCLM, MCLEN, MCLMFR, MCLMDE, MCLMES, MCLMOL | BI, TIEN, TIDE, TIFR, TIES, TIOI, AB, ABEN, ABFR, ABDE, ABES, ABOL, DETD, DETDEN, DETDDE, DETDES, DETDFR, DETDOL, DETDOR, CLM, CLEN, CLMFR, CLMDE, CLMES, CLMOL, MCLM, MCLEN, MCLMFR, MCLMDE, MCLMES, MCLMOL |

| Numeric properties | PHP* | * |

<table>
<thead>
<tr>
<th>Patent classification</th>
<th>IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER, IPCI, IPCR, IPC.REF</th>
<th>IPC8: IPC, IPC.TAB, IPCI, IPCR</th>
<th>IPC8: IPC, IPC, IPCR, IPC.REF, IPC.A, IPC.AI, IPC.F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other: EPC, EPC.KW</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inventor</th>
<th>IN (AU)</th>
<th>IN (AU)</th>
<th>IN (AU)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Patent assignee / patent holder</th>
<th>PA (CS)</th>
<th>PA (CS)</th>
<th>PA (CS)</th>
</tr>
</thead>
</table>

| Priority data | PRC, PRD, PRY, PRYF, PRNO (PRN) APPS | PRAIO (PRAI, PRN) | PRAIO, PRC, PRD, PRY, PRYF, PRN, PRNO, APPS |

| Application data | AI AC, AD, AY AP, APPS, PCS DS | AI (AP) | AI (AP) AC, AD, AY AP, APPS, PCS DS |

| Publication data | PI PC, PD, PY PN PK PCS | PI (PN) | PI PC, PD, PY PN PK PCS |

| Legal status | LS, LS2, FAM, CFAM | LS, LS2 |

| Other | CLMN, DETN, DT, GIS, GIT, LA, LAF, FA | CLMN, DETN, DT, GIS, GIT, LA, LAF, FA |

* Numeric properties: $E^1 A/PHP$ lists properties available for numeric search (cf. database description). The search is performed in all fields containing English text. There are no specific display fields, but the hit numeric values will be highlighted.

### 31.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRNO</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, DS</td>
</tr>
</tbody>
</table>
32 PCTGEN

32.1 Brief description

**Producer:** World Intellectual Property Organisation (WIPO), Switzerland; FIZ Karlsruhe, Germany

**Period covered:** Since August 2001

**Size:** More than 12.1 million sequence documents on patents (August 2014), Nucleic acids: 9.75 million, Proteins: 2.3 million

**Updated:** Weekly

**Languages:** English (French, German)

32.2 Contents

- Nucleotide and amino acid sequence data as submitted electronically by patent applicants to the World Intellectual Property Organization (WIPO)
- Title, patent assignee, patent and priority numbers, sequence ID
- Molecule type and organism
- Features and modifications of the sequence
- All data exactly as filed by the applicant
- Some gene sequences with the translated amino acid sequence directly aligned (if entered by applicant)

32.3 Dynamics

One patent application may include more than one sequence. Every sequence is entered in a separate record in the PCTGEN database. The individual records are not updated, the database follows the static principle.

The Accession number includes the publication year and number and the sequence ID and should be used to access a record.

32.4 Updating

The data are usually entered in the PCTGEN database one day after publication of the sequence listings by the World Intellectual Property Organisation (WIPO).
32.5 Document from PCTGEN

Display format: IALL

ACCESSION NUMBER: 2001057272.15599 DNA PCTGEN

TITLE: HUMAN GENOME- DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR ANALYSIS OF GENE EXPRESSION IN HUMAN PLACENTA

PATENT ASSIGNEE: Molecular Dynamics, Inc. Penn, Sharron G. Rank, David R. Hanzel, David K. Chen, Wensheng

PATENT INFO: WO 2001057272 200010809


ENTRY DATE: 20020923

DOCUMENT TYPE: Patent

ORGANISM: Homo sapiens

SEQUENCE LENGTH: 100

SEQUENCE

1 cccagagatt ctgattctgc aaatcttgag cagcctgaga ttctgcagtt
51 ctatgaagct tccaggtagt gtcaatgctg gtgctaggct gaccatagta

FEATURE TABLE:

<table>
<thead>
<tr>
<th>Key</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MAP TO AL035448.28</td>
</tr>
<tr>
<td></td>
<td>EXPRESSED IN PLACENTA, SIGNAL</td>
</tr>
<tr>
<td></td>
<td>= 1.5</td>
</tr>
<tr>
<td>NT HIT: U29185.1, EVALUE 7.00e-04</td>
<td></td>
</tr>
<tr>
<td>EST HUMAN HIT: AA047634.1, EVALUE 2.20e-01</td>
<td></td>
</tr>
</tbody>
</table>

32.6 Selected Fields

<table>
<thead>
<tr>
<th>PCTGEN</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN, ED, UP</td>
<td>AN, ED, UP</td>
<td>AN</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, MTY, ORGN, TI</td>
<td>TI, MTY, ORGN</td>
<td>MTY, ORGN, TI</td>
</tr>
<tr>
<td>Indexing</td>
<td>FEAT, SQL, SEQN, SQEP, SQEFP, SQSP, SQSFP, SQEN, SQSN*</td>
<td>FEAT, SQL, SEQN, SEQ, SEQ3, SQEO, SQE3, SQE0</td>
<td>FEAT, SQL, SEQN, SEQ, SEQ3, SQE0</td>
</tr>
<tr>
<td>Inventor</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA, (CS)</td>
<td>PA (CS)</td>
<td>PA</td>
</tr>
<tr>
<td>Priority data</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Related documents**</td>
<td>RLN (RLI), RLC, RLD, RLY</td>
<td>RLI, RLO</td>
<td>RLC, RLD, RLN (RLI), RLY</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AP, APPS, AY</td>
<td>AI (AP), APPS</td>
<td>AC, AD, AI, AP, APPS, AY</td>
</tr>
<tr>
<td>Publication data</td>
<td>PATS, PC, PCS, PD, PN, PY</td>
<td>PI (PN), PATS</td>
<td>PC, PCS, PD, PI, PN, PY</td>
</tr>
<tr>
<td>Sources</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other</td>
<td>DT</td>
<td>DT</td>
<td>DT</td>
</tr>
</tbody>
</table>

* Use one of the RUN packages GETSEQ, GETSIM, or BLAST to retrieve sequence data in the SQ? fields.

** Priority data, if available, are entered in this field.

32.6.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN</td>
</tr>
</tbody>
</table>
33 RDISCLOSURE

33.1 Typical queries
- Searches for the state of the art in technical disclosure publications (world-wide, free-text only) to complement searches in other international patent databases, e.g.:
  - What European inventions are there on Bar code labels?
- Name searches (applicant only; often anonymous), e.g.:
  - What technical disclosure of International Business Machines Corporation has been published during the past year?
- Searches using formal data (e.g. numbers), e.g.:
  - What is in the text of the technical disclosure, RD 460128?
- Full-text display of technical disclosure:
  - What is the text of RD 420006?
- Using the full-text to find material for an opposition

33.2 Brief description
Producer: Questel Ireland Ltd, Ireland
Period covered: Since 1960
Size: More than 43,300 records (August 2014)
Updated: Monthly
Languages: 90 % English (plus French, German, Spanish, etc.)

33.3 Contents
- Full text and drawings from Technical Disclosure of inventions
- Defensive publications as an alternative to other types of intellectual property, such as patents or utility models; source is the monthly journal Research Disclosure
- Reasons for publication:
  - Low-cost alternative to prevent patenting by others
  - Complement to patents, as all patent offices use this source regularly
- Title, text, drawing(s), publication information (country code RD), application/priority information in PRAI field
- Names (assignee, inventor, or ‘anonymous’) in PA field
- Bibliographical details and full-text searchable, text and drawing(s) available for display as TIFF or PDF
- Up to early 2001 RD documents were entered in Derwent World Patents Index, including the IPC (to subclass, added by Derwent) and other Derwent indexing
- International Patent Classification IPC1–8 (often only subclass level), exists in approx. 50 % of the documents, IPC thesaurus, range search possible
- European patent classification ECLA, standardized, approx. 30 % of the documents contain the ECLA in addition to the IPC
- References to non-patent literature
33.4 Dynamics

The RDISCLOSURE database follows the static principle. The documents from the Research Disclosure journal are entered and will not be updated.

33.5 Updating

Documents are entered in the database approx. 14 days after the publication date of the Research Disclosure journal. IPC and/or ECLA data and references are added twice a year.

33.6 Document from RDISCLOSURE

Display format: ALL (contains the ASCII text without drawings)

AN 487019 RDISCLOSURE
TI Injection process to reduce the static unbalance of a plastic injected fan for motor cooling system of a motor vehicle
PA Anonymous
PI RD 487019 20041110
PRAI RD 2004-487019 20041020
REN XP007134461
CODEN: RSDSBB; ISSN: 0374-4353
LA English
DT Patent
GI N
GIS 45378
IPCI F04D
IPCR F04D0029-66 [I,A]; F04D0029-66 [I,C*]
EPC F04D0029-66C2
TX 487019

Injection process to reduce the static unbalance of a plastic injected fan for motor cooling system of a motor vehicle

The aim of the disclosed invention is to reduce the static unbalance of an injected plastic fan for motor cooling system of a motor vehicle. The chosen process is the addition of injected flyweight coming from the same injection step than the fan injection step and the use of a mobile pad in the injection mold to modulate the weight of the injected flyweight. The first realization mode presented Fig 1 is to add injected flyweight (1) on the fan distal ring (2). The second realization mode presented Fig 2 is to add injected flyweight (1) on the fan blades (3). In this case the flyweight could have the shape of an air deflector improving the airflow capacity of the fan. The third realization mode presented Fig 3 is to add flyweight (1) on the fan hub (4). Alternatively to Fig 3, the flyweight (1) could be localized in the internal face of the hub (4). In such a case, the flyweight does not disturb the airflow.

Disclosed anonymously

Display format: ALLG (contains the text and the drawings as image)

AN 487019 RDISCLOSURE
TI Injection process to reduce the static unbalance of a plastic injected fan for motor cooling system of a motor vehicle
PA Anonymous
PI RD 487019 20041110
PRAI RD 2004-487019 20041020
REN XP007134461
CODEN: RSDSBB; ISSN: 0374-4353
Injection process to reduce the static unbalance of a plastic injected fan for motor cooling system of a motor vehicle

The aim of the disclosed invention is to reduce the static unbalance of an injected plastic fan for motor cooling system of a motor vehicle. The chosen process is the addition of injected flyweight coming from the same injection step than the fan injection step and the use of a mobile pad in the injection mold to modulate the weight of the injected flyweight. The first realization mode presented Fig 1 is to add injected flyweight (1) on the fan distal ring (2). The second realization mode presented Fig 2 is to add injected flyweight (1) on the fan blades (3). In this case the flyweight could have the shape of an air deflector improving the airflow capacity of the fan. The third realization mode presented Fig 3 is to add flyweight (1) on the fan hub (4). Alternatively to fig 3, the flyweight (1) could be localized in the internal face of the hub (4). In such a case, the flyweight does not disturb the airflow.

Disclosed anonymously
### 33.7 Selected Fields

<table>
<thead>
<tr>
<th>RDISCLOSURE</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN UP (ED)</td>
<td>AN UP (ED)</td>
<td>AN UP (ED)</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI TI</td>
<td>TI TTI TX</td>
<td>TI TTI TX</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.VER; EPC</td>
<td>IPC8: IPC, IPC.TAB, IPCI, IPCR; EPC</td>
<td>IPC8: IPC, IPC, IPCR, IPC.A, IPC.AI, IPC.C, IPC.CI, IPC.F; EPC</td>
</tr>
<tr>
<td>Inventor</td>
<td>(included in PA)</td>
<td>(included in PA)</td>
<td>(included in PA)</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS)</td>
<td>PA</td>
<td>PA (CS)</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRD, PRY, PRN APPS</td>
<td>PRAI</td>
<td>PRD, PRY, PRN, APP5</td>
</tr>
<tr>
<td>Application data</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Publication data</td>
<td>PD, PY, PN, PATS</td>
<td>PI (PN)</td>
<td>PI (PN)</td>
</tr>
<tr>
<td>Legal status</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Sources</td>
<td>SO, ISN</td>
<td>SO, ISN</td>
<td>SO</td>
</tr>
<tr>
<td>Other</td>
<td>DT, GIS, GIT</td>
<td>DT, GIS, GIT</td>
<td>DT, GIS, GIT</td>
</tr>
</tbody>
</table>

### 33.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>PRN</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PC</td>
</tr>
</tbody>
</table>
34 RUSSIAPAT

34.1 Typical queries

- Searches for the state of the art in Russia (text and classification), e.g.:
  - What inventions were made in Russia on Removing Contamination from Sand?
- Name searches (inventor, applicant, agent), e.g.:
  - What inventions of Vserossijskij nauchno-issledovatelskij institut konservnoj i ovoshchesushilnoj promyshlennosti (gosudarstvennoe nauchnoe uchrezhdenie) (RU) have been published in Russia during the past year?
  - What patent applications are there in Russia of Mr Fisenko Boris Lavrentevich?
- Searches using formal data (numbers: publication number, application number), e.g.:
  - What is contained in the patent numbered RU 2252679?
  - Who is the patent assignee of the publication numbered RU 96123699?
- Legal status searches:
  - What is the entry date into the national phase in Russia of the PCT application of Siemens, WO 2001082432 / RU 2255399?

34.2 Brief description

Producer: ROSPATENT Russian Agency for Patents and Trademarks, Russia
Period covered: Since 1924
Size: More than 1.96 million records on patents, more than 438,000 patent drawings (August 2014)
Updated: 3 times per month
Languages: English

34.3 Contents

- Patents and patent applications from Russia (publication country RU); some older documents with country code SU are still being published
- Bibliographical details including IPC, names (inventor, applicant – transliteration) since 1924
- Titles in English since 1977, Abstracts in English since 1994
- International Patent Classification IPC1–8, IPC thesaurus, range search possible, currently no re-classification of the back-file
- All patent drawings (use special display formats; pre-defined formats display title page drawing) since 1994
- Legal status data since 1994

34.4 Dynamics

The RUSSIAPAT database follows the static principle: documents are not updated. If several publications exist for the same application new records are created in the database.

34.5 Updating

The documents are entered into the database a few days after publication.
AB  FIELD: electrical engineering.
SUBSTANCE: proposed draw-out equipment unit has control device disposed on its face control panel and designed to open or close auxiliary make-break contacts. Gate equipped with contact unit is shifted by means of link gear that has link body with worm helical line circuit. Section of worm helical line circuit has lower pitch and provides for closing auxiliary make-break contacts applying low
forces for shaft control.
EFFECT: facilitated control of auxiliary make-break contacts.
24 cl, 6 dwg

34.7 Selected Fields

<table>
<thead>
<tr>
<th>RUSSIAPAT</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED (UP)</td>
<td>AN ED (UP)</td>
<td>AN ED (UP)</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, TI, AB, FLD</td>
<td>TI, AB, FLD</td>
<td>TI, AB, FLD</td>
</tr>
<tr>
<td>Patent classification</td>
<td>IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER; IPC1.-7: IC, MGR, SGR ICM, ICS</td>
<td>IPC8: IPC, IPC.TAB, IPCI, IPCR; IPC1.-7: IC (IPC), ICM ICS</td>
<td>IPC8: IPC, IPCI, IPCR, IPC.A, IPC.AI, IPC.C, IPC.CI, IPC.F; IPC1.-7: IC (IPC), SCG, SCL, ICM, SCGM, SCLM, ICS, SCGS, SCLS,</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN (AU), INA</td>
<td>IN</td>
<td>IN, INA</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA (CS), PA.AP, PA.AS PAA</td>
<td>PA (CS)</td>
<td>PA (CS), PA.AP, PA.AS PAA</td>
</tr>
<tr>
<td>Agent</td>
<td>AG</td>
<td>AG</td>
<td>AG</td>
</tr>
<tr>
<td>Priority data</td>
<td>PRNO</td>
<td>PRNO</td>
<td>PRNO (PRAO)</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AY AP, APO</td>
<td>AC, AD, AY AP, APO</td>
<td></td>
</tr>
<tr>
<td>Publication data</td>
<td>PC PD, PY PN (PATS) PK, PIT PNO</td>
<td>PI (PATS), PIT PNO</td>
<td>PC, PD, PY PI, PN PK, PIT PNO</td>
</tr>
<tr>
<td>Legal status</td>
<td>LSRU.DFP, LSRU.DNP, LSRU.DPR</td>
<td>LSRU</td>
<td>LSRU.DFP, LSRU.DNP, LSRU.DPR</td>
</tr>
<tr>
<td>Other</td>
<td>CA, CLMN, DRWN, DT, EXPN, FA, GIS (GIS.FP), GIS.DRW, GIS.EM, GIT (GIT.FP), GIT.GRW, GIT.EM, GIN, (GIN.FP), GIN.DRW, GIN.EM, LA, TL</td>
<td>CA, DT, FA, GIS, GIS.GEW, GIS.EM, GIT, GIT.DRW, GIT.EM, GIN, GIN.GRW, GIN.EM, LA, TL</td>
<td>DT, FA, GIS (GIS.FP), GIS.DRW, GIS.EM, GIT (GIT.FP), GIT.GRW, GIT.EM GIN, (GIN.FP), GIN.DRW, GIN.EM, LA, TL</td>
</tr>
</tbody>
</table>

34.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN</td>
</tr>
<tr>
<td>International Patent Classification</td>
<td>IPC</td>
<td>ICM, ICS</td>
</tr>
</tbody>
</table>
35 USGENE

35.1 Brief description

Producer: SequenceBase Corporation, USA
Period covered: Since 1981
Size: More than 43.1 million sequence documents on patents (August 2014)
Updated: Weekly
Language: English

35.2 Contents

- Nucleic acid and peptide sequence data from patent applications and granted patents published by the US Patent and Trademark Office (USPTO)
- Original title, Patent assignee with address details, Inventor with address details, Application and Publication numbers, including PCT Application numbers, Patent number of Basic, Abstract, Patent claims, Sequence ID
- Molecule type and organism
- Features and modifications of the sequence
- Some gene sequences with the translated amino acid sequence directly aligned (if entered by applicant)
- Legal status data from INPADOCDB can be retrieved with the display fields LS, LS2, FAM and CFAM. Legal status data are not searchable.
- Direct Link to patent full texts

USGENE is a highly current and comprehensive source for all biosequences available from patent publications of the US Patent and Trademark Office (USPTO). This database is particularly suited for the needs of the researching pharmaceutical and biotech industries seeking patent protection for their biotechnical inventions in the U.S.A. and wishing to market their products in this country. It is ideal for all types of sequence patent searches, such as novelty, patentability, state of the art and in particular complements the high-quality sequence databases already available from STN, DGENE, REGISTRY, and PCTGEN. By using USGENE the quality and reliability of the search results from the sequence databases can be further improved.

35.3 Dynamics

Every sequence is entered in a separate record in the database. Thus, USGENE uses the same basic structure as DGENE and PCTGEN.

The individual records are not updated, the database follows the static principle.

35.4 Updating

USGENE provides weekly updates on Friday. Sequence data from issued patents is available within three days and from published applications within one day from publication.
35.5 Document from USGENE

Display format: IALL

ACCESSION NUMBER: 7229817

TITLE: Recombinant porcine liver esterases, their use and a method for the production thereof

INVENTOR(S): Bornscheuer Uwe (Greifswald, DE); Musidlowska Anna (Greifswald, DE); Schmidt-Dannert Claudia (Shoreview, MN); Lange Stefan (Stuttgart, DE)

PATENT ASSIGNEE: Degussa AG (Duesseldorf DE)

PATENT INFORMATION:
US 7229817 B2 20070612
US 20040161836 A1 20040819
WO 2002048322 A 20020620
US 2001-450156 A1 20011206
WO 2001-EP14338 A 20011206
ENTRY DATE: 20070724
DOCUMENT TYPE: Patent
ABSTRACT: The invention relates to biotechnologically expressible, enzymatically active recombinant porcine liver esterases, to a biotechnological method for the preparation thereof and to the use thereof in organic synthesis. The monomeric subunits of recombinant porcine liver esterase are truncated at their C-terminal end, compared with naturally occurring porcine liver esterase subunits. Moreover, it has proved to be an additional advantage to truncate the N-terminal end as well.

CLAIM:
US7229817 B2: 1. A recombinant subunit of porcine liver esterase having esterase activity, which comprises SEQ ID NO:1 lacking from 1 to 50 amino acids at the C-terminus.

2. The recombinant subunit of porcine liver esterase of claim 1, lacking from 3 to 10 amino acids at the C-terminus.

3. The recombinant subunit of porcine liver esterase of claim 1, lacking a sequence found in a wildtype porcine liver esterase of histidine, alanine, glutamic acid, and leucine (HAEL) at the C-terminus.

4. A recombinant subunit of porcine liver esterase having esterase activity, which is encoded by a polynucleotide sequence which hybridizes under stringent conditions to a polynucleotide sequence encoding SEQ ID NO: 1, wherein the stringent conditions comprise hybridization at 60 °C in 0.1 % SSC and 0.1% SDS, and wherein the esterase lacks from 1 to 50 amino acids at the C-terminus.


25. A method of resolving racemates of carboxylic acids, or their ester derivatives, comprising: contacting carboxylic acids, or their ester derivatives, with the porcine liver esterase as claimed in claim 11.

26. A method of converting a prostereogenic compound, comprising: contacting the prostereogenic compound with the porcine liver esterase as claimed in claim 11.

SEQUENCE SOURCE: PROTEIN; USPTO; GRANTED
ORGANISM NAME: Artificial Sequence
SEQUENCE LENGTH: 544
SEQUENCE:
1 gqpaspv pvd taggr vlgky vslieglaopv avfl gvpfak pplgs lrfap
51 popae wp s v knt typpmc cpdpv pveqmt sdlftngker l tles fed cl
101 ylni ytp d l t r gr l pvm wihGG GGl vlg gapmydgv v l aahenvv v v a
<table>
<thead>
<tr>
<th>USGENE</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN ED, UP</td>
<td>AN ED, UP</td>
<td>AN ED, UP</td>
</tr>
<tr>
<td>Contents information</td>
<td>BI, MTY, ORGN, TI, AB, ECLM</td>
<td>TI, MTY, ORGN, AB, ECLM</td>
<td>MTY, ORGN, TI, AB, ECLM</td>
</tr>
<tr>
<td>Indexing *</td>
<td>FEAT, SEQ, SQEP, SQEF, SQSF, SQSF, SQSN</td>
<td>FEAT, SQL, SEQ, SEQ3, SQEO, SQEN</td>
<td>FEAT, SQL, SEQ, SEQ3, SCORE</td>
</tr>
<tr>
<td>Inventor</td>
<td>IN</td>
<td>IN</td>
<td>IN</td>
</tr>
<tr>
<td>Patent assignee</td>
<td>PA, (CS)</td>
<td>PA (CS)</td>
<td>PA</td>
</tr>
<tr>
<td>Priority data</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Related documents **</td>
<td>RLN (RLI), RLC, RLD, RLY</td>
<td>RLI, RLIO</td>
<td>RLC, RLD, RLN (RLI), RLIO, RLY</td>
</tr>
<tr>
<td>Application data</td>
<td>AC, AD, AP, APPS, AY</td>
<td>AI (AP), AIO, APPS</td>
<td>AC, AD, AI, AIO, AP, APPS, AY</td>
</tr>
<tr>
<td>Publication data</td>
<td>PC, PD, BD, PK, KB, PN, PN (PATS), PN, PY, PY</td>
<td>PI (PN, PATS)</td>
<td>PC, PD, BD, PI, PK, KB, PN, PN, PY, PY</td>
</tr>
<tr>
<td>Sources</td>
<td>SSO</td>
<td>SSO</td>
<td>SSO</td>
</tr>
<tr>
<td>Other</td>
<td>DT, FS, SEQC</td>
<td>DT, FS, SEQC</td>
<td>DT, FS, SEQC</td>
</tr>
</tbody>
</table>

* Use one of the RUN packages GETSEQ, GETSIM, or BLAST to retrieve sequence data in the SQ? fields.
** Priority data, if available, are entered in this field.

### 35.6 Selected Fields

#### Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, RLN</td>
</tr>
</tbody>
</table>
36  USPATFULL / USPAT2

36.1  Typical queries

- Searches to find out the state of the art (full text, international and US classification), e.g.:
  - What US patents exist on Brakes for inline skates?
  - Is there an American patent for a product known as NOLU?
- Searches using names (inventor, applicant), e.g.:
  - What US patent publications of INTEL CORP. have there been in the last 4 weeks?
- Searches using formal data (e.g. numbers), e.g.:
  - What does the US patent, number 5,752,072, say?
  - Have there been any changes from the published US patent application, number US 2001003823, to the granted US patent, number US 6,311,197?
- SDI for US publications
- Using the full-text to find material for an opposition
- Multi-File searches with other national and regional patent databases

36.2  Brief description

Producer: U.S. Patent and Trademark Office, USA
Period covered: Since 1975, since 1971 for certain technical fields
USPAT2: since 2001
(Document from the period 1790-1975 can be found in USPATOLD)
Size: USPATFULL: more than 7.5 million patent publications (August 2014)
USPAT2: more than 2 million patent publications (August 2014)
Updated: Twice a week, US classification bimonthly
Language: English

36.3  Contents

- Full texts of Applications (since 2001-03-15) and Granted Patents published by the US Patent and Trademark Office (USPTO) in the Official Gazette (including Utility patents, Defensive publications, Design patents, Reissue patents, Statutory invention registrations, Plant patents).
  - USPATFULL: first or earliest publication
  - USPAT2: latest or newest publication
In the FS (File Segment) field it is noted whether the full text is that of the Application or that of the Granted Patent.
- Bibliographical details (title, publication number and date, application number and date, assignee, inventor – no assignee for Applications)
- Data on citations in REP
- Related patents, including Division, Continuation, Continuation in Part, etc. (application and publication details) in RLI
- Assignment/Reassignment information in RAI
Patent databases on STN International

- Abstract, all claims, further text fields (Summary: Background of the Invention, Summary of the Invention; Brief Description of the Drawings, Detailed Description of the Preferred Embodiment), no patent images (patent images can be retrieved using the full-text link)
- U.S. Classification codes (the current one in the NCL field, that at the time of publication in the INCL field), online thesaurus including catchwords
- International Patent Classification, IPC1–8, online thesaurus incl. catchwords, range searching is possible, re-classification of the backfile
- Common Patent Classification (CPC), online thesaurus, range searchable
- CA indexing details including Registry Number for chemistry-related documents (even if a different family member was indexed for CA)
- Information on PCT publications where the U.S. is a designated country
- Details of patent examination: referenced patent and non-patent literature, examiner’s name in the EXNAM field, classes of patent searched by the examiner in the EXF field.
- Other details: Legal representative, Term of patent (PTERM) of Design patents and Disclaimer date (DCD)

36.4 Dynamics
The USPATFULL database follows a dynamic principle with two databases. All national publications are noted in the PI field. The classification information in the NCLM and NCLS fields is amended when the US Classification is revised.

A document is only entered in USPAT2 when there is a second publication. An existing document in USPAT2 is overwritten with every further (third, etc.) publication, thus only the latest document to have been published can be found in this database. There is no document in USPAT2 if there is only one national publication.

There is a cluster USPATALL comprising the USPATFULL and USPAT2 databases.

36.5 Updating
New US patents appear in the database on the day of publication.

36.6 Document from USPATFULL

Display format: MAX

AN 2009:181468 USPATFULL
TI Exhaust Gas Purifying Catalyst
IN Suzuki, Hiromasa, Aichi-ken, JAPAN
PI US 20090163358 A1 20090625
US 7598205 B2 20091006
AI US 2006-884682 A1 20060127 (11)
WO 2006-JP1820 20060127
20070820 PCT 371 date
PRAI JP 2005-42681 20050218
DT Utility
FS APPLICATION
LREP FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP, 901 NEW YORK AVENUE, NW, WASHINGTON, DC, 20001-4413, US
ASSIGNMENT HISTORY FOR US 20090163358
RAI RAD: 20070820
RAUP: 20091006
RAK: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).
PAO: SUZUKI, HIROMASA [DATE EXECUTED: 20070713]
RAC: TOYOTA JIDOSHA KABUSHI KAISHA, I, TOYOTA-CHO, TOYOTA-SHI, AICHI-KEN, 471-8571, JAPAN
RAA: FINNEGAN, HENDERSON, FARABOW, GARRETT, & DUNNER, L.L.P., 901 NEW YORK AVENUE, NW, WASHINGTON, DC 20001-4413
MRN: 19763 MFN: 243 (2 Page(s))
In a three-way catalyst for purifying exhaust gases from internal combustion engines, scattering of bismuth components can be suppressed by employing a Bi-Ti composite oxide at a predetermined ratio. Accordingly, the effect of suppressing hydrogen sulfide emissions can be retained for a long time. This catalyst comprises a support substrate, ...

SUMM TECHNICAL FIELD
The present invention relates to a catalyst for purifying exhaust gases from internal combustion engines such as automobile engines, and more particularly to an exhaust gas purifying catalyst capable of suppressing hydrogen sulfide (H_2S) emissions.

BACKGROUND ART
Nowadays, a three-way catalyst is widely used as a catalyst for purifying NO_x (nitrogen oxides), CO carbon monoxide and HC (hydrocarbons) in exhaust gases from automobiles or the like. The three-way catalyst comprises a porous oxide supports such as alumina, ...

DISCLOSURE OF THE INVENTION
Problems to be Dissolved by the Invention
The present invention has been made in view of the abovementioned problems. It is an object of the present invention to provide an exhaust gas purifying catalyst which can reduce scattering of bismuth and can retain the effect of suppressing H_2S emissions for a long time. ...

DRWD BRIEF DESCRIPTION OF THE DRAWINGS
FIG. 1 is a graph showing the Bi residual ratio as a function of the Bi content per unit volume of a support substrate. ...

DETD BEST MODES FOR CARRYING OUT THE INVENTION
The exhaust gas purifying catalyst of the present invention comprises a support substrate and a catalyst layer, and the catalyst layer is formed on the support substrate and includes a noble metal, a porous oxide and a Bi-Ti composite oxide. In other words, the catalyst layer includes a Bi-Ti composite oxide in addition to a conventional three-way catalyst, as mentioned before. ...

CLM What is claimed is:
1. An exhaust gas purifying catalyst, comprising: a support substrate; and a catalyst layer formed on said support substrate and including a noble metal, a porous oxide, and a bismuth and titanium composite oxide, the ratio R of the molar amount of bismuth loaded per unit volume of said support substrate to the molar amount of titanium loaded per unit volume of said support substrate satisfying 0.3 ltoreq R.

4. The exhaust gas purifying catalyst according to claim 1 or 2, wherein the molar amount of bismuth loaded per unit volume of said support substrate is not less than 0.2 mol/liter and not more than 0.4 mol/liter.
Patent databases on STN International

INCL  INCLM:  502/325.000
INCLS:  502/344.000
NCL  NCLM:  502/325.000
NCLS:  502/304.000; 502/327.000; 502/332.000; 502/333.000; 502/334.000;
       502/349.000; 502/350.000; 502/351.000; 502/353.000; 502/355.000;
       502/344.000
IPC  IPCI - B01J0023-38 [I,A]
     - B01J0023-00 [I,A]; B01J0023-38 [I,A]
     - B01J0023-00 [I,C]; B01J0023-00 [I,A]; B01J0023-38 [I,C];
     - B01J0023-38 [I,A]
CHEMICAL ABSTRACTS INDEXING  COPYRIGHT 2009 ACS on STN

-----------------------------
PATENT KIND DATE
-----------------------------
OS  CA 145:234838 * WO 2006087920 A1 20060824
* CA Indexing for this record included
CC  59-3 (Air Pollution and Industrial Hygiene)
ST  exhaust gas purifying catalyst bismuth titanium oxide catalyst
IT  Air pollution
    (control; exhaust gas purifying catalyst)
...

36.7  Document from USPAT2

Display format: MAX

AN  2009:181468 USPAT2
TI  Exhaust gas purifying catalyst
IN  Suzuki, Hiromasa, Toyota, JAPAN
PA  Toyota Jidosha Kabushiki Kaisha, Toyota shi, Aichi-ken, JAPAN (non-U.S.
corporation)
P1  US 7598205          B2  20091006
    WO 2006087920 20060824
AI  US 2006-884682 20060127 (11)
    WO 2006-JP1820 20060127
    20070820 PCT 371 date
PRAI JP 2005-42681 20050210
DT  Utility
FS  GRANTED
REP US 4937058         Jun 1990 Dupin et al.
    US 5120695         Jun 1992 Blumrich
    US 6022826         Feb 2000 Deeba
    US 6350421         Feb 2002 Strehlau
    US 6616904         Sep 2003 Becue
    US 714692          Jun 1996
    US 1384248         Feb 1975
    US 6120342         May 1986
    US 220561          May 1990
    US 581521          Nov 1993
    US 815554          Feb 1996
    US 986928          Mar 1997
REN International Search Report,
    Written Opinion of the International Searching Authority, dated May 2007
EXNAM Primary Examiner: Wood, Elizabeth D
LREP Finnegan, Henderson, Farabow, Garrett & Dunner, LLP
ASSIGNMENT HISTORY FOR US 7598205
RAI RAI:  20070820
RAUP:  20091006
RAX: ASSIGNMENT OF ASSIGNS INTEREST (SEE DOCUMENT FOR DETAILS).
PAO: SUZUKI, HIROMASA [DATE EXECUTED: 20070713]
RAC: TOYOTA JIDOSHA KABUSHIKI KAISHA, 1, TOYOTA-CHO, TOYOTA-SHI,
     AICHI-KEN, 471-8571, JAPAN
RAA: FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P., 901 NEW
     YORK AVENUE, NW, WASHINGTON, DC 20001-4413
In a three-way catalyst for purifying exhaust gases from internal combustion engines, scattering of bismuth components can be suppressed by employing a Bi-Ti composite oxide at a predetermined ratio. Accordingly, the effect of suppressing hydrogen sulfide emissions can be retained for a long time. This catalyst comprises a support substrate, and a catalyst layer formed on the support substrate and including a noble metal, a porous oxide, and a Bi-Ti composite oxide, and satisfies 0.3 ≤ R ≤ 1.5, where R is the molar ratio of the Bi content to the Ti content per unit volume of the support substrate.

What is claimed is:

1. An exhaust gas purifying catalyst, comprising: a support substrate; and a catalyst layer formed on said support substrate and including a noble metal, a porous oxide, and a bismuth and titanium composite oxide, the ratio R of the molar amount of bismuth loaded per unit volume of said support substrate to the molar amount of titanium loaded per unit volume of said support substrate satisfying 0.3 ≤ R ≤ 1.5.

4. The exhaust gas purifying catalyst according to claim 1 or 2, wherein the molar amount of bismuth loaded per unit volume of said support substrate is not less than 0.2 mol/liter and not more than 0.4 mol/liter.
## 36.8 Selected Fields

<table>
<thead>
<tr>
<th>USPATFULL</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accession number and update codes</strong></td>
<td>AN ED, UP, UPCA</td>
<td>AN</td>
<td>AN</td>
</tr>
<tr>
<td><strong>Contents information</strong></td>
<td>BI, TI, AB CLM ECLM</td>
<td>TI, AB, ABS, DETD, DRWD, SUMM CLM ECLM</td>
<td>TI, AB, DETD, DRWD, SUMM CLM ECLM</td>
</tr>
<tr>
<td><strong>Indexing</strong></td>
<td>RN IT, CT, ST CC, SX</td>
<td>RN IT, CT, ST CC, SX</td>
<td>RN IT, CT, ST CC, SX</td>
</tr>
<tr>
<td><strong>Patent classification</strong></td>
<td>IPC8: IPC, IPC.TAB, IPCI, IPCR IPC1-7: IC, ICM, ICS CPC: CPC, CPC.TAB, CPC.UNIQ, CPC.VER Other: NCL, NCLM, NCLS, INCL, INCLM, INCLS, SX</td>
<td>IPC8: IPC, IPCI, IPCR, IPC.A, IPC.AI, IPC.F IPC1-7: IC, ICM, ICS CPC: CPC, CPCI, CPCR, CPC.HIT, CPC.UNIQ, Other: NCL, NCLM, NCLS INCL, INCLM, INCLS, SX</td>
<td>IPC8: IPC, IPCI, IPCR, IPC.A, IPC.AI, IPC.F IPC1-7: IC, ICM, ICS</td>
</tr>
<tr>
<td><strong>Inventor</strong></td>
<td>IN, IN.CTY, IN.CNY, IN.ST, IN.ZIP</td>
<td>IN, INA</td>
<td>IN, IN.CTY, IN.CNY, IN.ST, IN.ZIP</td>
</tr>
<tr>
<td><strong>Patent assignee / patent holder</strong></td>
<td>PA, PA.CTY, PA.CNY, PA.ST, PA.ZIP, PAT</td>
<td>PA, PAA PAT</td>
<td>PA, PA.CTY, PA.CNY, PA.ST, PA.ZIP, PAT</td>
</tr>
<tr>
<td><strong>Priority data</strong></td>
<td>PRC, PRD, PRN, PRY APPS</td>
<td>PRAI, PRN APPS</td>
<td>PRC, PRD, PRAI, PRN, PRY APPS</td>
</tr>
<tr>
<td><strong>Application data</strong></td>
<td>AC, AD, AP, AY APPS</td>
<td>AI, AP APPS</td>
<td>AC, AD, AP, AY APPS</td>
</tr>
<tr>
<td><strong>Publication data</strong></td>
<td>PC, PD, PN, PY PCS, PATS</td>
<td>Pi, PN PATS</td>
<td>PC, PD, Pi, PN, PY PCS, PATS</td>
</tr>
<tr>
<td><strong>Related documents</strong></td>
<td>RLC, RLD, RLN, RLY, RLPN, RLPY, RLP APPS, PATS</td>
<td>RLI, RLN APPS, PATS</td>
<td>RLC, RLD, RLI, RLN, RLT, RLY, RLPN, RLPY, RLP APPS, PATS</td>
</tr>
<tr>
<td><strong>Legal status data</strong></td>
<td>DCD, PTERM EXNAM EXF GOVI LREP, AG</td>
<td>DCD, PTERM EXNAM EXF GOVI LREP PARN</td>
<td>DCD EXNAM EXF GOVI LREP PARN</td>
</tr>
<tr>
<td><strong>Citations</strong></td>
<td>REN RPCL, RPC, RPIN, RPIC, RPN, RPD, RPY PCS, PATS</td>
<td>REN REP, RPN PATS</td>
<td>RPLC, RPC, REP, RPIN, RPIC, RPN, RPD, RPY PCS, PATS</td>
</tr>
<tr>
<td><strong>Sources</strong></td>
<td>OS</td>
<td>OS</td>
<td>OS, OSPN</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>ARTU, ART DT, TC FA LA LN.CNT CLMN</td>
<td>ARTU DT FA LA LN.CNT CLMN ECL</td>
<td>ARTU DT, TC LA</td>
</tr>
</tbody>
</table>

### 36.8.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN, RLN</td>
</tr>
<tr>
<td>International Patent Classification, Old</td>
<td>IPC.OLD</td>
<td>IC, ICA, ICI</td>
</tr>
<tr>
<td>International Patent Classification</td>
<td>IPC</td>
<td>ICM, ICS</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, RPC</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, RPN, RLPN</td>
</tr>
</tbody>
</table>
37  **USPATOLD**

37.1  **Typical queries**
- See USPATFULL, but for documents before 1976

37.2  **Brief description**

Producer: Univentio Information Services B.V., Netherlands
Period covered: 1790-1975
Size: More than 3.6 million patent publications (August 2014)
Updated: Static file, no more documents are added (but US classification is updated bimonthly, update of the IPC and CAS indexing)
Language: English

37.3  **Contents**
- Full text of U.S. patents (including Reissue patents) issued by the U. S. Patent and Trademark Office and published in the Official Gazette
- No overlapping with USPATFULL/USPAT2
- Bibliographical details: title, publication number and date, application number and date, assignee, inventor
- CAS title, CAS patent assignee, CAS inventor name for chemistry-related documents (even if a different family member was indexed for CA)
- Abstract, all claims, other text fields
- CA indexing, including Registry Number, for chemistry-related documents (even if a different family member was indexed for CA)
- U.S. Classification codes (the current code in the NCL field, that at the time of publication in the INCL field), online thesaurus including catchwords
- International Patent Classification, online thesaurus including catchwords, range searching is available, re-classification of the documents
- Citations in REP
- Details of patent examination: referenced patent literature, examiner's name in the EXNAM field
- All texts are created by Optical Character Recognition (OCR) software. This means that there may be errors and incomplete text. Some of the documents do not have text because the scanning failed.

37.4  **Dynamics**

USPATOLD is a static file. No new documents are being added. Only the classifications (NCL and IPC) and CA indexing are updated.

37.5  **Updating**
Not relevant, as no more documents are added.
BACKGROUND OF THE INVENTION

Field of the Invention This invention relates to the preparation of magnesium fluoride. More particularly, it relates to a process for preparing a crystalline magnesium fluoride suitable for preparing a crystalline magnesium fluoride suitable for special purposes such as infrared lenses and other optical devices.

While there has been shown and described what are at present considered the preferred embodiments of the invention, it will be obvious to those skilled in the art that various changes and modifications may be made therein without departing from the scope of the invention as defined by the appended claims.

What is claimed is:

1. A process suitable for producing crystalline magnesium fluoride comprising:
   a) forming a reaction mixture consisting essentially of ammonium bifluoride, an aqueous solution of ammonium hydroxide and magnesium carbonate, said ammonium bifluoride and ammonium hydroxide being in stoichiometric excess of said magnesium carbonate; (b) heating the foregoing mixture at a temperature of at least about C. for a time sufficient to form an intermediate solid complex; (c) separating said complex from the aqueous phase; (d) drying said complex at a temperature of at least about C. and (e) heating the dried complex to at least about 3 C. to form magnesium fluoride.

2. A process according to Claim 1 wherein the molar ratio of ammonium bifluoride to magnesium carbonate is greater than about 3:2.

3. A process according to Claim 2 wherein the molar ratio of ammonium hydroxide to magnesium carbonate is greater than about 10:2.

4. A process according to Claim 3 wherein said reaction mixture is heated at a temperature of from about C. to about C.

5. A process according to Claim 3 wherein said dried complex is heated at a temperature of from about C. to C.
Guide to STN Patent Databases

CA FILE CAN CAPLUS AN PATENT NUMBER

OS 82:45946 * 1975:45946 US 3848066
* CA Data for this record included
CC 49-5 (Industrial Inorganic Chemicals)
ST magnesium fluoride high purity
IT 7783-40-6
(munuf. of high purity, from ammonium bifluoride- magnesium carbonate mixt. and ammonium hydroxide)
IT 546-93-0
(reaction of, with ammonium bifluoride and ammonium hydroxide)
IT 1336-21-6
(reaction of, with ammonium bifluoride-magnesium carbonate mixt.)
IT 1341-49-7
(reaction of, with magnesium carbonate and ammonium hydroxide)

37.7 Selected Fields

<table>
<thead>
<tr>
<th>USPATOLD</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accession number and update codes</td>
<td>AN</td>
<td>AN</td>
<td>AN</td>
</tr>
</tbody>
</table>
| Contents information | BI, TI, AB
CLM, ECLM | TI, TI.CA, AB, DETD, CLM, ECLM | TI, TI.CA, AB, DETD, CLM, ECLM |
| Indexing | RN
IT, CT, ST, CC, SX | RN
IT, CT, ST, CC, SX | RN
IT, CT, ST, CC, SX |
| Patent classification | IPC8: IPC, IPC.KW, IPC.ACD, IPC.VER, IPC1-7: IC, ICM, ICS, MGR, SGR, IPC.OLD, CPC: CPC, CPC.ACD, CPC.KW, CPC.VER, Other: NCL, NCLM, NCLS, INCL, INCLM, INCLS, SX | IPC8: IPC, IPC.TAB, IPCI, IPCR, IPC.A, IPC.AI, IPC.F, IPC1-7: IC, ICM, ICS, CPC: CPC, CPC.TAB, Other: NCL, NCLM, NCLS, INCL, INCLM, INCLS, SX | IPC8: IPC, IPCI, IPCR, IPC.A, IPC.AI, IPC.F, IPC1-7: IC, ICM, ICS, CPC: CPC, CPC.TAB, Other: NCL, NCLM, NCLS, INCL, INCLM, INCLS, SX |
| Inventor | IN, IN.CTY, IN.CNY, IN.ST, IN.ZIP | IN, IN.CA, INA | IN, IN.CA, IN.CTY, IN.CNY, IN.ST, IN.ZIP |
| Patent assignee | PA | PA, PA.CA | PA, PA.CA, PA.CNY |
| Priority data | PRC, PRD, PRN, PRY APPS | PRAI, PRN APPS | PRC, PRD, PRAI, PRN, PRY APPS |
| Application data | AC, AD, AP, AY APPS | AI, AP APPS | AC, AD, AI, AP, AY APPS |
| Publication data | PC, PD, PN, PY PCS, PATS | PI, PN PATS | PC, PD, PI, PN, PY PCS, PATS |
| Legal status data | EXNAM | EXNAM | EXNAM |
| Citations | RPC, RPN, PATS | REP, RPN, PATS | RPC, REP, RPN, PATS |
| Sources | OS | OS | OS, OSPN |
| Other | DT, TC, FA, FS, LA, LN.CNT | DT, FA, FS, LA, LN.CNT | DT, TC, LA |

37.7.1 Super-Search Fields

<table>
<thead>
<tr>
<th>Search Field Name</th>
<th>Search Code</th>
<th>Fields searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Group</td>
<td>APPS</td>
<td>AP, PRN</td>
</tr>
<tr>
<td>Patent Countries Group</td>
<td>PCS</td>
<td>PC, RPC</td>
</tr>
<tr>
<td>Patent Number Group</td>
<td>PATS</td>
<td>PN, RPN</td>
</tr>
</tbody>
</table>
Types of search
38 Search by subject

Subject searches are carried out in the main to establish the state of the art for a particular specialist field, to find out about solutions to a technical problem, or to find patents comparable to a present invention (prior art). These searches can take place with the aid of text entries (Text search) and of the International Patent Classification (IPC), the National Classification (USCL in the USA), or the Derwent Classification (in DWPI) – (Classification search). In some databases it is possible to use special indexing entries for searching (Search by indexing).

Usually it is not possible to obtain a 100% complete list of text keywords (to search by text) or a 100% complete list of classification codes, so a combined strategy is the best approach in many cases. Having a search problem comprising two aspects, for example, both keywords and classification codes should be found for both aspects. These will then be linked for the search using this scheme:

1. IPC* (Aspect 1) AND Keywords (Aspect 2)
2. Keywords (Aspect 1) AND IPC* (Aspect 2)
3. IPC* (Aspect 1) AND IPC (Aspect 2)
4. Keywords (Aspect 1) AND Keywords (Aspect 2)

(* – or any other classification)

These four results will then be combined to form the total result (using the OR operator). Depending on the field of search and the database used each partial search will yield a portion of the total result. This strategy is demonstrated in the sample searches.

Moreover, the result of the plain text search (4th item) should be checked for the classification codes appearing in the documents. Often this helps to improve the search strategy with respect to the classification.

38.1 Notes on subject searches in DWPI

In DWPI, in addition to the combined text and classification search a plain text search should always be made. By the enhanced title and abstract by Derwent this database is ideal for a good result of plain text searches. Adverse effects from an incorrect classification can be avoided this way.

It may also help to classify only to the level of the subclass and then combine these codes with a text search. The Derwent Classification (DC) may also be used.

If abbreviations are used there is often a problem of the same abbreviation being used for different terms in different specialist fields, e.g.:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>Acrylonitrile-Butadiene-Styrene</td>
</tr>
<tr>
<td>GPS</td>
<td>Glycoproteins</td>
</tr>
<tr>
<td>PCB</td>
<td>Polychlorinated Biphenyl</td>
</tr>
<tr>
<td>Anti-Blocking System</td>
<td>Global Positioning System</td>
</tr>
</tbody>
</table>

Often it is enough to link the search query with the appropriate file segment or to exclude one file segment from the search:

=> S GPS NOT CPI / FS

File segments in DWPI:

- CPI: Chemical Patent Index
- EPI: Electrical Patent Index
- GMPI: General and Mechanical Patent Index
## 39 Search by text

### 39.1 Search fields

<table>
<thead>
<tr>
<th>Database</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUPATFULL</td>
<td>/BI, /TI, /AB, /CLM, /MCLM</td>
<td>TI, AB, DETD, CLM, MCLM</td>
<td>Bi, TI, AB, MCLM, CLM: Left truncation available Language: English</td>
</tr>
<tr>
<td>CANPATFULL</td>
<td>/BI, /TI, /TIEN, /TIFR, /AB, /ABEN, /ABFR, /CLM, /CLMEN, /CLMFR, /MCLM, /MCLMEN, /MCLFR</td>
<td>TI, TIEN, TIFR, AB, ABEN, ABFR, DETD, DETDEN, DETDDE, DETFR, CLM, CLMEN, CLMFR, MCLM, MCLMEN, MCLMFR</td>
<td>Bi, TI, AB, MCLM, CLM: Left truncation available Languages: English, French</td>
</tr>
<tr>
<td>CAPPLUS</td>
<td>/BI, /OBI, /IA, /TI, /AB, /IT, /ST</td>
<td>TI, AB, IT, ST</td>
<td>Bi, TI, AB, IT, ST: Left truncation available Language: English</td>
</tr>
<tr>
<td>CNFULL</td>
<td>/BI, /TI, /AB, /CLM</td>
<td>TI, AB, DETD, CLM, MCLM</td>
<td>Bi, TI, AB, MCLM, CLM: Left truncation available Language: English</td>
</tr>
<tr>
<td>DEFULL</td>
<td>/BI, /TI, /TIDE, /TIEN, /AB, /ABDE, /ABEN, /CLM, /CLMDE, /CLMEN, /DETD, /DETDDE, /DETDEN, /MCLM, /MCLMDE, /MCLMEN</td>
<td>TI, TIDE, TIEN, AB, ABDE, ABEN, CLM, CLMDE, CLMEN, DETD, DETDDE, DETDEN, MCLM, MCLMDE, MCLMEN</td>
<td>Bi, TI, AB, MCLM, CLM: Left truncation available Languages: English, German</td>
</tr>
<tr>
<td>DGENE</td>
<td>/BI, /TI, /KW, /DESC, /ORGN, /FEAT</td>
<td>TI, AB, KW, DESC, ORGN, FEAT</td>
<td>FEAT: Left truncation available Language: English</td>
</tr>
<tr>
<td>DPCI</td>
<td>/BI, /TI</td>
<td>TI</td>
<td>Bi: Left truncation available Language: English</td>
</tr>
<tr>
<td>DWPI, Invention level</td>
<td>/BI, /AB, /ABDT, /ABEX /TI, /TT, /ACTN, /ACTV, /ADV, /DETD, /DRWD, /NOV, /TECH, /USE</td>
<td>TI, TT, AW, AB, ABEQ ACTN, ACTV, DETD, DRWD, NOV, TECH, UADV, USE</td>
<td>All text fields: Left truncation available Language: English no stop words</td>
</tr>
<tr>
<td>DWPI, Publication level</td>
<td>/BIEX, /TIDE, /TIEN, /TIEN, /TIES, /TIFR</td>
<td>TIDE, TIEN, TIES, TIFR ABDE, ABEN, ABFR, MCLM (CLM), CLMEN, CLMDE, CLMFR</td>
<td>BIEX: Left truncation available Language: English, German, French, Spanish</td>
</tr>
<tr>
<td>ENCOMPPAT</td>
<td>/BI, /TI, /AB</td>
<td>TI, AB, CT, LT, ST, CTA, LTM, RN</td>
<td>Bi, TI, AB: Left truncation available Language: English</td>
</tr>
<tr>
<td>EPFULL</td>
<td>/BI, /SBI (/TI, /AB, /MCLM) /TI /AB /CLM /MCLM</td>
<td>TI, TI.M, TIDE, TIDE.M, TIEN, TIEN.M, TIFR, TIFR.M AB.M (AB), AB.PK, ABEN.M (ABEN), ABEN.PK, ABDE.M (ABDE), AND.PK, ABFR.M (ABFR), ABFR.PK CLM, CLM.M, CLM.PK, CLM.PKN, CLMEN, CLMEN.M, CLMEN.PK, CLMEN.PKN, CLMDE, CLMDE.M, CLMDE.PK, CLMDE.PKN, CLMFR, CLMFR.M, CLMFR.PK, CLMFR.PKN, CLMFR(n), CLMFR(n) MCLM, MCLM.M MCLMDE, MCLMDE.M MCLMEN, MCLMEN.M MCLMFR, MCLMFR.M DETD, DETDEN, DETDDE, DETDDE(n) DETDFR, DETDFR(n)</td>
<td>Bi, TI, AB, MCLM, CLM: Left truncation available Language: English, German, French</td>
</tr>
<tr>
<td>Database</td>
<td>SEARCH</td>
<td>DISPLAY</td>
<td>Explanation</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------</td>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FRANCEPAT</td>
<td>/BI, /TI, /AB</td>
<td>Ti, AB</td>
<td>Bl, AB: Left truncation available  Language: French</td>
</tr>
<tr>
<td>FRFULL</td>
<td>/BI, /TI, /AB,</td>
<td>TiFR(TI), TiEN, ABFR(AB), ABEN, DETD, CLM, MCLM</td>
<td>Bl, TI, AB, MCLM, CLM: Left truncation available  Language: French, English,</td>
</tr>
<tr>
<td>GBFULL</td>
<td>/BI, /TI, /AB,</td>
<td>Ti, AB, DETD, CLM, MCLM</td>
<td>Bl, TI, AB, MCLM, CLM: Left truncation available  Language: English</td>
</tr>
<tr>
<td>IFIALL</td>
<td>/BI, /TI, /AB,</td>
<td>Ti, AB, ECLM, ACLM, RN, BOTI, GI, NTE</td>
<td>Bl, TI, AB, CLM: Left truncation available  Language: English</td>
</tr>
<tr>
<td>IMSPATENTS</td>
<td>/BI, /CN, /CNS, /TN, /CO, /APP, /CC, /ST</td>
<td>CN, TN, CO, APP, CC, ST, TX, AB, RN</td>
<td>Bl, AB, CNS, TX: Left truncation available  Language: English</td>
</tr>
<tr>
<td>INFULL</td>
<td>/BI, /TI, /AB, /DETD, /CLM</td>
<td>Ti, AB, DETD, CLM, MCLM</td>
<td>Bl, TI, AB, MCLM, CLM: Left truncation available  Language: English</td>
</tr>
<tr>
<td>INPADOCDB / INPAFAMDB</td>
<td>/BI, /TI, /AB (/AB, /ABDE, /ABFR, /ABES, /ABOL)</td>
<td>Ti, AB, ABDE, ABFR, ABES, ABOL</td>
<td>Bl, TI, AB: Left truncation available  Various languages</td>
</tr>
<tr>
<td>JAPIO</td>
<td>/BI /TI</td>
<td>Ti, AB</td>
<td>Bl: Left truncation available  Language: English</td>
</tr>
<tr>
<td>JPFULL</td>
<td>/BI, /TI, /AB, /DETD, /CLM</td>
<td>Ti, AB, DETD, CLM, MCLM</td>
<td>Bl, TI, AB, MCLM, CLM: Left truncation available  Language: English</td>
</tr>
<tr>
<td>KOREAPAT</td>
<td>/BI, /TI, /AB</td>
<td>Ti, AB</td>
<td>Bl: Left truncation available  Language: English</td>
</tr>
<tr>
<td>LITALERT</td>
<td>Patents: /BI, /TI, /ACT, /NCTL, /NTE</td>
<td>Patents: Ti, ACT, NCTL, NTE</td>
<td>Bl: Left truncation available  Language: English</td>
</tr>
<tr>
<td>PATDPA</td>
<td>ST, /SW</td>
<td>Ti, AB</td>
<td>Bl: Left truncation available  Language: German</td>
</tr>
<tr>
<td>PATDD</td>
<td>ST</td>
<td>Ti, AB</td>
<td>Bl: Left truncation available  Language: German</td>
</tr>
<tr>
<td>PATDAFULL</td>
<td>/BI, /CLM, /TI</td>
<td>AB, CLM, DETD, Ti</td>
<td>Bl, TI, AB, MCLM, CLM: Left truncation available  Language: German</td>
</tr>
<tr>
<td>PATDASPC</td>
<td>/BI, /APP, /CN, /CEC, /CN,OC, /GAR, /NTE, /RN,CEC, /RN,OC, /REO, /TN</td>
<td>RN, CN, IT, LS, TN</td>
<td>Bl, CNS: Left truncation available  Language: German, English</td>
</tr>
<tr>
<td>PCTFULL</td>
<td>/BI, /TI, /TIDE, /TIEN, TiDE, TIEN, TiFR, TiES, /TIOL, AB, ABDE, ABEN, ABFR, ABES, ABOL, CLM, CLMDE, CLMEN, CLMF, CLMES, CLMOL, DETD, DETDE, DETDEN, DETD, DETDFS, DETDOL, MCLM, MCLMDE, MCLMEN, MCLMF, MCLMES, MCLMOL</td>
<td>Ti, TIDE, TIEN, TiFR, TiES, TiOL, TIER AB, ABDE, ABEN, ABFR, ABES, ABOL, ABOR, CLM, CLMDE, CLMEN, CLMF, CLMES, CLMOL, CLMOR DETD, DETDE, DETDEN, DETDFS, DETD, DETDOL, DETDOR MCLM, MCLMDE, MCLMEN, MCLMF, MCLMES, MCLMOL, MCLMOR</td>
<td>Bl, TI, AB, MCLM, CLM: Left truncation available  Languages: English, German, French, Spanish</td>
</tr>
<tr>
<td>PCTGEN</td>
<td>/BI, /TI, /ORGN, /MTY, /FEAT</td>
<td>Ti, ORGN, MTY, FEAT</td>
<td>Bl, FEAT: Left truncation available  Language: English</td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td>/TI (including full text), /TI</td>
<td>Ti (full text display in ALL or ALLG (TIFF) format)</td>
<td>Bl: Left truncation available  Languages: 95 % English, (5 % German, French, Spanish)</td>
</tr>
<tr>
<td>RUSSIA PAT</td>
<td>/BI, /TI, /AB, /FLD</td>
<td>Ti, AB, FLD</td>
<td>Bl: Left truncation available  Language: 95 % English, (5 % German, French, Spanish)</td>
</tr>
<tr>
<td>USGENE</td>
<td>/BI, /TI, /AB, /ORGN, /MTY, /ECLM, /FEAT</td>
<td>Ti, MTY, ORGN, AB, ECLM, FEAT</td>
<td>Bl, FEAT: Left truncation available  Language: English</td>
</tr>
<tr>
<td>USPATFULL/ USPAT2</td>
<td>/BI, /TI, /AB, /CLM, /ECLM</td>
<td>AB, DETD, DRWD, SUMM, Ti CLM, ECLM</td>
<td>Bl, AB, TI, CLM, ECLM: Left truncation available  Language: English</td>
</tr>
</tbody>
</table>

194
### Types of search

<table>
<thead>
<tr>
<th>Database</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>USPATOLD</td>
<td>/BI, /TI, /AB /CLM, /ECLM</td>
<td>AB, TI, TI.CA, CLM, ECLM</td>
<td>Bi, AB, TI, CLM, ECLM: Left truncation available. Language: English</td>
</tr>
</tbody>
</table>

### 39.2 Contents of the Basic Index

<table>
<thead>
<tr>
<th>Database</th>
<th>Title(s)</th>
<th>Abstract(s)</th>
<th>Indexing terms</th>
<th>Claim(s)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUPATFULL</td>
<td>TI</td>
<td>AB</td>
<td>CLM, MCLM</td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>CANPATFULL</td>
<td>TI, TIE, TIEN</td>
<td>AB, ABEN, ABFR</td>
<td>CLM, CLMEN, CLMFR, MCLM, MCLMEN, MCLFR</td>
<td>DETDEN, DETDFR</td>
<td></td>
</tr>
<tr>
<td>CAPLUS</td>
<td>TI</td>
<td>AB</td>
<td>ST, IT, CT, CW</td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>CNFULL</td>
<td>TI</td>
<td>AB</td>
<td>CLM, MCLM</td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>DEFULL</td>
<td>TI, TIDE, TIEN</td>
<td>AB, ABDE, ABEN</td>
<td>CLM, CLMEN, MCLM, MCLMEN, MCLMDE</td>
<td>DETD, DETDEN, DETDDE</td>
<td></td>
</tr>
<tr>
<td>DGENE</td>
<td>TI</td>
<td>AB</td>
<td>KW, DESC, ORGN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPCI</td>
<td>TI</td>
<td>AB</td>
<td></td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>DWPI, BI</td>
<td>TI, TIE, AW</td>
<td>AB (ACTN, ACTV, ADV, ALE, DETD, DRWD, NOV, UADV, USE), TECH, ABEQ, ABEX, ABDT</td>
<td>KW, MC, PLE, CMC (for subscriber)</td>
<td>Searching only in fields of the invention level (ABEQ is part of the publication level)</td>
<td></td>
</tr>
<tr>
<td>DWPI, BIE</td>
<td>TIE, TIE, TIE</td>
<td>ABDE, ABEN, ABFR</td>
<td>MCLM (CLM)</td>
<td>Searching only in fields of the publication level</td>
<td></td>
</tr>
<tr>
<td>ENCOMPPAT</td>
<td>TI</td>
<td>AB</td>
<td>CT, CTA, CW, LT, LTM, ST, RN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPFULL</td>
<td>TI</td>
<td>AB (all claims)</td>
<td>DETD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRANCEPAT</td>
<td>TI</td>
<td>AB</td>
<td>CT, CFTR</td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>FRFULL</td>
<td>TIE, TIEN</td>
<td>ABFR, ABEN</td>
<td>CLM, MCLM</td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>GBFULL</td>
<td>TI</td>
<td>AB</td>
<td>CL; MCLM</td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>IFIALL</td>
<td>TI</td>
<td>AB</td>
<td>RN (all claims)</td>
<td>GOVI, BOTI, GI, NTE, PARN</td>
<td></td>
</tr>
<tr>
<td>IFIUIDB</td>
<td>TI</td>
<td>AB</td>
<td>RN (all claims)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFICDB</td>
<td>TI</td>
<td>AB</td>
<td>RN (all claims)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMSPATENTS</td>
<td>AB</td>
<td>AB</td>
<td>CN, CNS, TN, APP, CC, ST, TX, RN</td>
<td>CO, PA</td>
<td></td>
</tr>
<tr>
<td>INFULL</td>
<td>TI</td>
<td>AB</td>
<td>CLM, MCLM</td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>INPADOCDB / INPAFAMDB</td>
<td>TI</td>
<td>AB (AB, ABDE, ABFR, ABES, ABOL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAPIO</td>
<td>TI</td>
<td>AB</td>
<td></td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>JFULL</td>
<td>TI (TIEN)</td>
<td>AB</td>
<td>CLM, MCLM</td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>KOREAPAT</td>
<td>TI</td>
<td>AB</td>
<td></td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>LITALERT</td>
<td>Patents: TI Trademarks: TM</td>
<td>Patents: NCTL, Trademarks: TMCC, TMCT</td>
<td>NTE, ACT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDD</td>
<td>TI</td>
<td>AB</td>
<td>ST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDPA</td>
<td>TI</td>
<td>AB</td>
<td>MCLM since 1996</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDPAFULL</td>
<td>TI</td>
<td>AB</td>
<td>all Claims (1996)</td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>PATDPAFULL</td>
<td>TI</td>
<td>AB</td>
<td>all Claims</td>
<td>DETD</td>
<td></td>
</tr>
<tr>
<td>PATDPAFPC</td>
<td>TN</td>
<td>RN, RN.CEC, RN.OC, RN.PCC, CN, CN.CEC, CN.OC, CN.PCC, IT</td>
<td>LS, NTE, APP, GRA, REQ,</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>Database</th>
<th>Title(s)</th>
<th>Abstract(s)</th>
<th>Indexing terms</th>
<th>Claim(s)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCTFULL</td>
<td>TI, TIDE, TIEN, TIFR, TIES, TIOL</td>
<td>AB, ABDE, ABEN, ABFR, ABES, ABOL</td>
<td>CLM, CLMDE, CLMEN, CLMFR, CLMES, CLMOL, MCLM, MCLMDE, MCLMEN, MCLMFR, MCLMES, MCLMOL</td>
<td>DETD, DETDDE, DETDEN, DETDFR, DETDES, DETDOL, DETDOR</td>
<td></td>
</tr>
<tr>
<td>PCTGEN</td>
<td>TI</td>
<td></td>
<td>ORGN, MTY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td>TI</td>
<td>Full Text</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RUSSIAPAT</td>
<td>TI</td>
<td>AB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USGENE</td>
<td>TI</td>
<td>AB</td>
<td>ORGN, MTY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USPATFULL/USPAT2</td>
<td>TI</td>
<td>AB</td>
<td>ST, IT, RN from CA</td>
<td>all Claims</td>
<td>SUMM, DETD, DRWD, PARN, GOVI</td>
</tr>
<tr>
<td>USPATOLD</td>
<td>TI (incl. CAS titles)</td>
<td>AB</td>
<td>ST, IT, RN from CA</td>
<td>all Claims</td>
<td>DETD</td>
</tr>
</tbody>
</table>

39.3 Notes on all databases

Text searching can be done in all databases in the Basic Index (/BI or without a SEARCH qualifier). The searched terms can be entered in a truncated form:

```plaintext
=> $ SENSOR?
L1 9491 SENSOR?
```

The following types of truncation can be used:

- `?` replaces any number of characters (or none) at the end of the search term or at the beginning in the case of left-hand truncation
- `#` replaces one character or none at the end of the search term
- `!` replaces exactly one character in the middle or at the end of the search term

In addition to the Boolean operators AND, OR and NOT, **Proximity operators** may be used. These types of proximity are available for text searching:

- `(W), (1W), (2W), ..., (NOTW)` — terms are adjacent (with a spacing of 1, 2 ... words, or not) in the specified order.
- `(A), (1A), (2A), ..., (NOTA)` — terms are adjacent (with a spacing of 1, 2 ... words or not), in any order.
- `(T), (1T), (2T), ..., (NOTT)` — the terms are connected, the terms may be written in one word (T) or have a space (1T) or hyphen (1T) or even another term (2T) between them, e.g.
  - `?micro? (2T) ?mechanical?` would find e.g. micromechanical, microelectromechanical, micro mechanical, micro electromechanical, micro-electro-mechanical ;
  - `?anti? (1T) ?allerg?` would find e.g. anti-allergic, antigen, allergen, quantifying allergens (sometimes this does not work at line breaks)
- `(S)` — terms are adjacent in the same sentence/subunit (e. g. pairs of descriptors) or in the same paragraph of text (DWPI, invention level).
- `(L)` or `(P)` — terms are in the same field, in any order.
  - `(L) in PATDPA, IFIALL, CA, ENCOMPPAT, RUSSIAPAT, USPATFULL, USPAT2, USPATOLD etc.,
  - `(P) in INPADOCDB, INPAFAMDB, PATDD, EFPFULL, PATDPAFULL, PCTFULL, FRFULL, FRANCEPAT
- `(P)` — DWPI, invention level: terms are adjacent in the same section of the abstract, in any order
- `(L)` — DWPI: terms are adjacent in one segment of the publication level, in any order; at invention level (L) proximity works as AND
Types of search

(S) or (P) in full text databases — terms are adjacent in the same paragraph of a field, in any order.
(S) in EPFULL, PATDPAFULL, PCTFULL, FRFULL,
(P) in USPATFULL, USPAT2, USPATOLD, IFIALL

(L) in segmented full text databases — terms are adjacent in the same document (segment) of the full text, in any order (AUPATFULL, CANPATFULL, CNFULL, DEFULL, EPFULL, FRFULL, GBFULL, INFULL, JPFULL, PATDPAFULL, PCTFULL)

In the text fields, (W) is implied proximity if no other (Boolean or proximity) operator is entered. Hyphenated terms are split at the hyphen and each part entered into the index separately. If a hyphen is entered as part of a search then it will automatically be replaced by (W). Special characters, such as =, /, *, are considered as blanks. To avoid confusion when searching for characters that are used in the STN command language (/, AND, OR) these must be entered in "..." or '...'.

=> FIL PATDPAFULL
=> S A-D-WANDLER
  1008914 A
  997724 D
  64998 WANDLER
L1  14732 A-D-WANDLER
    (A/W)D(W)WANDLER

=> S A-D-WANDLER
  'D-WANDLER' IS NOT A VALID FIELD CODE
L2  0 A/D-WANDLER

=> S "A/D-WANDLER"
  1008914 "A"
  997724 "D"
  64998 "WANDLER"
L3  14732 "A/D-WANDLER"
    ("A"(W)"D"(W)"WANDLER")

=> FIL EPFULL
=> S STOP AND GO
  199412 STOP
  86109 GO
L4  19895 STOP AND GO

=> S "STOP AND GO"
  199412 "STOP"
  2339900 "AND"
  86109 "GO"
L5  716 "STOP AND GO"
    ("STOP"[W]"AND"[W]"GO")

=> S STEP AND SCAN
MISSING TERM BEFORE 'AND'

=> S "STEP AND SCAN"
  623871 "STEP"
  2339900 "AND"
  65798 "SCAN"
L6  1174 "STEP AND SCAN"
    ("STEP"[W]"AND"[W]"SCAN")

During a text search it should be considered if ambiguous terms could lead to unwanted results (i.e. documents from a different field of technology). In these cases a combined search with classification codes is particularly advisable.

Left truncation. This is available in many databases in order to deal with compounds easily. Special care must be taken when using combined left and right truncation (Floating Stem, the term entered must be at least 4 letters long). A too short search term may result in a very long search time or even in the search being aborted. However, rather longer stems should be used, for the following reasons:

- The short stem may occur in different contexts:

  => S ?HEMD?
Tasche eines Oberhemdes angesteckt werden kann. Selbstverständlich enthält das Abisolierwerkzeug 100 keine Kugelschreibermine. Es ist möglich, anstelle von Standardteilen eines Kugelschreibers auch spezifiziert hergestellte Teile einzusetzen.


- A too short search term may result in a very long search time

This problem occurs mostly in German databases because the German language uses compounds extremely often. In any case EXPAND and EXPAND LEFT should be used to check in advance if the intended search query will yield a reasonable result:

If necessary a longer stem (possibly more than one) should be found in order to do a search with left and right truncation in a reasonable time.

Stop words. Certain frequent words are excluded from indexing in the Basic Index. These words become unavailable for searching this way, even if used in a string search. If entered as part of a search they are normally ignored, but they are counted if proximity operators are used. It is a disadvantage, anyway, that this makes it impossible to search for certain combinations of terms including stop words.

When entered without proximity operators the words are linked by Implied Proximity. The system replaces spaces between the words by proximity operators and recognizes any stop words. If a stop word was used a ‘free space’ is considered:

If a proximity operator was entered the system will not recognize the stop words:
Types of search

Thus, using proximity operators the extra space for the stop word must be considered:

```
=> S UNWANTED(1W) PRODUCT#
   11425 UNWANTED
   2185880 PRODUCT#
L3   208 UNWANTED(1W) PRODUCT#
```

```
=> D 7 12 KWIC=5
L3  ANSWER 7 OF 208 HCAPLUS COPYRIGHT 2006 ACS on STN
AB  Endotoxin is an unwanted by product of recombinant
     proteins purified from...
L3  ANSWER 12 OF 208 HCAPLUS COPYRIGHT 2006 ACS on STN
AB  ...1,3-BDSA is more complicated with unwanted
     products such as SO2 and benzene...
```

In **EPFULL** (and other files) stop words do not exist:

```
=> FILE EPFULL
=> S UNWANTED BY PRODUCT#
   2458 UNWANTED
   034345 BY
   100593 PRODUCT#
L12  9 UNWANTED BY PRODUCT#
     (UNWANTED(W)BY(W)PRODUCT#)
```

(Note on this example: The term ‘by product’ must of course also be searched as ‘byproduct’ in all the databases.)

In the table below it is shown how a list of stop words can be displayed in each of the databases.

<table>
<thead>
<tr>
<th>Database</th>
<th>Stop words</th>
<th>Online Help</th>
<th>Standard</th>
<th>Fields in /BI</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUPATFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CANPATFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAPLUS</td>
<td>Yes</td>
<td>? content</td>
<td>CA</td>
<td>Ti, ST, IT, CT, CW, AB</td>
</tr>
<tr>
<td>CNFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DGENE</td>
<td>Yes</td>
<td>non</td>
<td>DERWENT</td>
<td>Ti, KW, AB, DESC, ORGN</td>
</tr>
<tr>
<td>DPCI</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DWPI</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOMPPAT</td>
<td>Yes</td>
<td>? content</td>
<td>CA</td>
<td>Ti, AB, CT, ST, RN</td>
</tr>
<tr>
<td>EPFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRANCEPAT</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFIALL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMSPATENTS</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INPADOCDB / INPAFAMDB</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAPIO</td>
<td>Yes</td>
<td>? content</td>
<td>CA</td>
<td>Ti, CT, AB</td>
</tr>
<tr>
<td>JPFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KOREAPAT</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDD</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDPA</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDPAFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDPASPCC</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCTFULL</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCTGEN</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RUSSIAPAT</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USGENE</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USPATFULL/USPAT2</td>
<td>Yes</td>
<td>? stopwords</td>
<td>USPATFULL</td>
<td>Ti, CLM, DETD, SUMM, DRWD, AB, PARN, GOVI</td>
</tr>
<tr>
<td>USPATOLD</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Changed text substances (e.g., introduction of abstracts from a certain date) may have an influence on search results. For the time after the introduction of a new text substance the number of hits of a text search may be considerably higher. This should particularly be taken into account when performing statistical analyses as the search result is more complete for the documents having the new text substance. In turn, with the same search strategy the search result will be less complete for earlier documents not having the extra text substance.

In some databases (in particular those following the dynamical principle) text substances may be added to already existing documents. This must be considered when doing a current awareness search. There exist update fields to take this into account (cf. “Monitoring patents”).

**Abbreviations.** In some databases, such as World Patents Index and Chemical Abstracts, where the text substances (Title, Abstract, Index terms) are edited by the database producer, there are abbreviation lists for abbreviations often used in the documents. These abbreviations must be considered in a search, the result otherwise being incomplete. It is advisable to SET ABBREVIATIONS ON in order to search for abbreviations automatically. (The current abbreviation list can be displayed with HELP ABB in the databases.)

```
=> FIL WPIINDEX
=> SET ABB ON
=> S HARD DISK DRIVE
  135496 HARD
  121185 DISK
  792044 DRIVE
  7385 HARD DISK DRIVE
  (HARD(W)DISK(W)DRIVE)
  2997 HDD
L11  8977 HARD DISK DRIVE
```

**Spelling.** With SET SPELLINGS ON the system will search both British and American spellings automatically:

```
=> FIL INPADOCDB
=> SET SPELLINGS ON PERM
=> S ?ALUMI NUM?
  140565 ?ALUMI NUM?
  169182 ?ALUMINUM?
L2  290476 ?ALUMI NUM?
    (?ALUMI NUM? OR ?ALUMINIUM?)
```

If SET SPELLING is not on, this feature can be activated by appending it to the search command:

```
=> SET SPELLINGS OFF
=> S GLASS FIBER? SPE=ON
  369326 FIBER?
  256257 FIBRE?
  566579 FIBER?
   (FIBER? OR FIBRE?)
L1  37192 GLASS FIBER?
   (GLASS(W)FIBER?)
```

### 39.4 Using proximity operators with searches in text fields

Proximity operators offer the opportunity of searching with a higher precision, compared to the Boolean operators AND, OR, NOT, by searching for the terms entered only within a certain scope (e.g. in one field, in one sentence, or within a specified distance). The way proximity operators are used is different between the databases with a segmented structure and other databases, possibly with special features in any of the databases. Therefore help is available in all of the databases (HELP (S), HELP (P), HELP (L)).

In literature databases and in most patent databases with static or dynamic concept proximity operators are used like this:
Types of search

<table>
<thead>
<tr>
<th>Patent databases with static or dynamic concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Unit = Record</td>
</tr>
<tr>
<td>AND, OR, NOT</td>
</tr>
<tr>
<td>Field</td>
</tr>
<tr>
<td>Paragraph</td>
</tr>
<tr>
<td>full text databases, e.g. USPATFULL</td>
</tr>
<tr>
<td>Sentence</td>
</tr>
<tr>
<td>Compound terms</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Figure:** Proximity Operators in databases with static or dynamic concept

A sub-unit of a field is usually considered a ‘sentence’. In databases with a segmented structure above all (L) proximity differs in its use:

<table>
<thead>
<tr>
<th>Databases with file segmentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Unit = Record</td>
</tr>
<tr>
<td>AND, OR, NOT</td>
</tr>
<tr>
<td>Record</td>
</tr>
<tr>
<td>Field</td>
</tr>
<tr>
<td>Paragraph</td>
</tr>
<tr>
<td>full text databases, e.g. EPFULL</td>
</tr>
<tr>
<td>Sentence</td>
</tr>
<tr>
<td>Compound terms</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Figure:** Proximity operators in databases with segmented structure

This example shows the use of the (L) operator in INPADOCDB:

```
L1  ANSWER 1 OF 1  INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
AN  20203275 INPADOCDB UP 20061116 UW 200646
TI  DREHPFLUG DER NONSTOP-BAUART.
TL  German
IN  NAUD, BERNHARD
INS NAUD BERNHARD, FR
```
Guide to STN Patent Databases

PA CHARRUES NAUD
PAS NAUD EXPL CHARRUES, FR
DT Patent
Pl DE 3522933 A1 19860109
PI T DEA1 DOC. LAID OPEN (FIRST PUBLICATION)
DAV 19860109 unexamined printed without grant
STA PRE-GRANT PUBLICATION
AI DE 1985-3522933 A 19850627
AIT DEA Patent application
PRAI FR 1984-10577 A 19840629 (FRA)
PRAIT FRA Patent application

REC 5. THERE ARE 5 CITED REFERENCES (5 PATENT, 0 NON PATENT) AVAILABLE FOR THIS RECORD. ALL CITATIONS ARE AVAILABLE IN THE RE FORMAT.

AN 20203275 INPADOCDB UP 20061117
TI Vollldrehpflug.
TL German
IN NAUD, BERNHARD, BEAUPREAU, FR
INS NAUD BERNHARD, FR
PA CHARRUES NAUD, BEAUPREAU, FR
PAS CHARRUES NAUD BEAUPREAU, FR
DT Patent
Pl DE 3522933 C2 19940303
PI T DEC2 PATENT SPECIFICATION (SECOND PUBL.)
DAV 19940303 printed with grant
STA GRANTED
AI DE 1985-3522933 A 19850627
AIT DEA Patent application
PRAI FR 1984-10577 A 19840629 (FRA)
PRAIT FRA Patent application

This search yields a result, even though ‘Vollldrehpflug’ and ‘Nonstop’ do not appear in the same title but at different publication levels:

=> S (VOLLDREHPFLUG AND NONSTOP) /TI
28 VOLLDREHPFLUG/TI
112 NONSTOP/TI
L2 1 (VOLLDREHPFLUG AND NONSTOP)/TI

To search just within the same publication level, (L) must be used:

=> S (VOLLDREHPFLUG (L) NONSTOP) /TI
28 VOLLDREHPFLUG/TI
112 NONSTOP/TI
L3 0 (VOLLDREHPFLUG (L) NONSTOP)/TI

In DWPI the invention level has a dynamic concept, but the individual members at publication level are arranged as segments. Therefore (L) proximity cannot be used to restrict the search to one information unit. (L) proximity is used in conjunction with the document level indicator /DLVL search term to restrict searches to the invention or member patent level, e.g.

=> S (OIL (L) DEGREASING) /TIEN (L) PUBLICATION /DLVL
Both words must appear with one member.

L2 ANSWER 1 OF 11 WPINDEX COPYRIGHT 2007 THE THOMSON CORP on STN

Member(0002)
TIEN DEGREASING AND ZINC PHOSPHATE CHEMICAL CONVERSION LIQUID FOR STEEL MATERIAL WITH DEPOSITION OF OIL

Member(0003)
TIEN DEGREASING AND ZINC PHOSPHATE CHEMICAL CONVERSION LIQUID FOR STEEL MATERIAL WITH DEPOSITION OF OIL

Search only at the invention level.

=> S((PERMANENT MAGNET?) (P) (INDUCTION HEAT?)) /AB (L) INVENTION /DLVL

Thus, there is no operator to restrict a search to a particular field:
Types of search

<table>
<thead>
<tr>
<th>DWPI</th>
<th>AND, OR, NOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Unit = Record</td>
<td>(L)</td>
</tr>
<tr>
<td>Record</td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td></td>
</tr>
<tr>
<td>Section of the abstract</td>
<td>(P)</td>
</tr>
<tr>
<td>Paragraph</td>
<td>(S)</td>
</tr>
<tr>
<td>Compound terms</td>
<td>(A) = (N),</td>
</tr>
<tr>
<td></td>
<td>(W) = ()</td>
</tr>
</tbody>
</table>

**Figure:** Proximity operators in DWPI

The (P) operator is used to link search terms within one section of the abstract:

```plaintext
=> S ((MAGNET?) (P) (INDUCTION?)) / NOV
L7        2115 ((MAGNET?) (P) (INDUCTION?)) / NOV
=> D L7 HIT

L7   ANSWER 1 OF 2115 WPINDEX COPYRIGHT 2006 THE THOMSON CORP on STN NOV NOVELTY - The motor has an induction rotor with a shaft rotatably inserted into a center of a stator. A synchronous rotor (130) is slid in a longitudinal direction of the shaft between the stator and the induction rotor. Another synchronous rotor (140) is slid in the direction of the shaft between the stator and the induction rotor, where a magnetic flux of the synchronous rotors is varied according to a variation of an applied voltage.
```

The (S) operator is used to link search terms within a single text paragraph:

```plaintext
=> S ((MAGNET?) (S) (INDUCTION?)) / NOV
L8        2111 ((MAGNET?) (S) (INDUCTION?)) / NOV
=> S L7 NOT L8
L9           4 L7 NOT L8

=> D L9 HIT

L9   ANSWER 1 OF 4 WPINDEX COPYRIGHT 2006 THE THOMSON CORP on STN NOV NOVELTY - A urine detection system, comprises:
```

Here the search terms can be found in different paragraphs.
39.5 Notes on individual databases

In the Derwent World Patents Index, invention level, the titles and abstracts are newly formulated by the database producer (see the database description). Often more than one abstract is entered into the database for the same invention (from different publications in the patent family). The words from the title and abstract (incl. ABEQ, ABEX, ABDT and the sections of the abstracts) are indexed in the Basic Index (but ABEX and ABDT are displayable in the subscriber files only). They can be searched using left and right truncation. Additionally, the words of the title are available in the Basic Index in their grammatically basic forms as Title terms (also searchable in the /TT field). At the same time the proximity relations (i.e. the order of the individual words) are maintained. A thesaurus is available for the /TT field where the preferred form is shown:

```plaintext
=> E INPUTS/TT 5
E#  FREQUENCY  AT   TERM
   ---  ---------  ---  ------
E1   41       INPUT/OUTPUT/TT
E2    1       INPUT/OUTPUT/TT
E3     0      2  -->  INPUTS/TT
E4     0      2   INPUTTING/TT
E5     1      INPUT_SHAFT/TT

=> E INPUTS+USE/TT
E1   0  -->  INPUTS/TT
E2  324615 USE INPUT/TT
********** END **********

=> E INPUT+UF/TT
E1  324615  -->  INPUT/TT
E2     0    UF  Inputs/TT
E3     0    UF   Inputting/TT
********** END **********
```

Hyphenated terms are also entered into the /TT field; using EXPAND the various writings can be found:

```plaintext
=> E IN-LINE/TT 5
E#  FREQUENCY  AT   TERM
   ---  ---------  ---  ------
E1     1      IN-FLIGHT/TT
E2     1      IN-HOUSE/TT
E3   1626      1  -->  IN-LINE/TT
E4     1      IN-MOULD/TT
E5   309       1   IN-PHASE/TT

=> E INLINE/TT 5
E#  FREQUENCY  AT   TERM
   ---  ---------  ---  ------
E1     1      INLET-OUTLET/TT
E2     0      2   INLETS/TT
E3    16      1  -->  IN-LINE/TT
E4     3      INMARSAT/TT
E5     1      INMARSAT-A/TT
```

For every section of the abstract, e.g. /NOV, /TECH, there are special search fields, e.g.:

```plaintext
=> S ((PERMANENT MAGNET?) (P) (INDUCTION HEAT?)) /NOV
L1   6  ((PERMANENT MAGNET?) (P) (INDUCTION HEAT?)) /NOV
```

To link search terms in one section of the abstracts (P) proximity is recommended. Left truncation is available.

In Derwent World Patents Index, publication level, there are fields for the original data:

```plaintext
=> S LICHTBOGEN/TIDE
L4   504 LICHTBOGEN/TIDE
```

Apart from the /TI and /AB fields there is a special Basic Index, /BIEX. As the text may be in German, French or Spanish these languages should be considered. In order to include all text fields into the search both index fields must be combined:

```plaintext
5662  ?SCREWDRIVER?/BI
2062  ?SCREWDRIVER?/BIEX
```
Types of search

- 0 \textit{?SCHRAUBENZIEHER/BI}
- 286 \textit{?SCHRAUBENZIEHER/BIEX}
- 6377 \textit{(SCREWDRIVER? OR ?SCHRAUBENZIEHER?)/BI, BIEX}

The original data are available only from some of the patent offices:

- **Title:**
  - German patent applications, patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) from 1968
  - PCT applications (WO-A1/A2) from 1978
  - Japanese applications (JP-A) (Machine Assisted Translations) from 1975
  - Australian applications (AU-A) from 2004
  - United Kingdom granted patents (GB-B) since 2004

- **Abstracts:**
  - PCT applications (WO-A1/A2) from 1978

- **Claims:**
  - German patent applications, patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) from 1968
  - UK patents (GB-B, Derwent week 1984/09 to 1997/51 only)

In the Derwent Patents Citation Index only the title is available for text searching. It is recommended to do text and subject searches in the World Patents Index and switch to the DPCI file for the citation search only.

In INPADOCDB and INPAFAMDB the title (90% of all documents have titles, extensions to the title or original titles, TIO) and the abstract are available for searching. For most European languages it is entered in the original language, while for some non-European languages and Russian a translation into English is made. Abstracts are entered for publications from 42 countries since 1970, i.e. from US, GB (since 1897), WO, EP, CA, DE, FR, CN. However, abstracts are not generally entered, but the number of the existing abstracts is considerable (> 13 million). The language of the abstract is often English, but other languages occur. Therefore, a (multi-lingual) text or keyword search in INPADOCDB should be made to complement, but not to restrict, a classification search.

The long-term coverage may be very helpful with some search problems.
In INPAFAMDB the search indexes always cover the patent family. If two or more search terms are linked by AND the hits may come from several publications of the patent family. If this is not wanted (L) proximity must be used (see above).

In the Chemical Abstracts database, the title and abstract are edited by the database producer. The words of the title, the abstract, and chemical indexing terms, including CAS Registry numbers, are searchable in the Basic Index. Searching is also possible with left-hand truncation. Single words from the abstract are additionally searchable in a specific /AB search field; the words of the Basic index excluding the abstract (i.e. only titles and index data) can also be searched in the /OBI search field.

In the Multilingual databases (DEFULL, EPFULL, PCTFULL, PCTGEN, RDISCLOSURE, INPADOCDB, INPAFAMDB) the key words, apart from English, should also be entered in other languages.

In the full text databases on the one hand the complete text of the publication, on the other hand the individual text components (Title, Abstract, Main Claim, All Claims) can be searched.

In the Basic Index single words from all text fields (Title, Abstract, All Claims and more text fields) are searchable. (Right and left hand truncation are available.) This usually yields a high number of results compared to text searches in other patent databases, yet the result often contains documents of little relevance. In order to limit the number of hits and at the same time improve the relevance of the documents retrieved:

- Proximity operators should be used and
- The FOCUS command should be used to sort the result.

It is advisable not to use AND but the (S) operator or the (P) operator (in USPATFULL/USPAT2, USPATOLD and IFIALL) to link two or more terms.

Because of the extensive text components, where specific expressions and quite likely even company names, trademark names, etc., can be found, full text databases are particularly useful to search for opposition material and for monitoring searches.

In USPATFULL, USPAT2 and USPATOLD Full text Browsing is possible, i.e. a document can be browsed by screens and searches by additional aspects can be done.

In EPFULL German and French terms should be used in addition to English. To display fields in a particular language display formats are available that prefer a certain language, e.g. by DISPLAY CLMDE German claims are preferred.

In AUPATFULL, CANPATFULL, DEFINULL, GBFULL, INFULL, JPFULL, and PCTFULL certain text components are generated by Optical Character Recognition (OCR) software, i.e., recognition errors may occur and text components may be incomplete. These databases are multilingual: PCTFULL – English, German, French, Spanish; GBFULL – French, English.

PATDPAFULL contains the full text of German patent applications (‘Offenlegungsschriften’), patents (‘Patentschriften’) and translations of European patent documents as well as German utility models (‘Gebrauchsmuster’) (no description, only claims), published by the German Patent and Trademark Office. There are no documents from European or PCT applications with Germany as designated state in this database. It is therefore recommended to also consult the EPFULL and PCTFULL databases if a comprehensive search for documents relevant for Germany is wanted.

IFIALL should be seen as a full text database with respect to text searches, even if only the title, abstract and all claims are available.

In Derwent Geneseq DGENE and in PCTGEN every record only has the information on one single sequence claimed in a patent. Thus, the data of a single patent are spread over as many records as sequences are claimed in the patent.

The title of a record in DGENE is the same as that of the corresponding record in DWPI. The Abstract (AB), Keywords (KW), and Description (DESC) contain a description of the properties of the individual sequence indexed in the record. All text fields can be searched using the Basic Index or (excluding the abstract) the separate search fields /TI, /KW, /DESC.

PCTGEN contains the original titles of the patents. The Basic Index includes, apart from the Title (English, French, German), the Molecule Type /MTY and the Organism Name /ORGN; Abstracts are not available.
Types of search

The Feature Table (FEAT) provides descriptions of the properties of partial sequences. It is searchable in the /FEAT search field where left hand truncation can be used. On sequence searching see “Search by subject index”.

The IMSPATENTS file contains information on the international patent families of the chemical substances forming a number of important pharmaceutical products. In contrast to other patent databases, the Basic Index does not contain the words indexed from the text of the patents (i.e. title, abstract, claims), but information helping to identify the substance searched (i.e. chemical names, trade names, clinical applications). The TX field contains notes on the patent publication covered by the record (e.g. scope of protection, legal status, expiry date). The abstract contains remarks on the respective patent family and is usually the same for all patents having the same priority, but may be different for the other patents of the technical family, i.e. claiming the same substance but with a different priority.

In the /CNS (Chemical Name Segment) search field left hand truncation may be used. When searching this field apart from the chemical names of the substance (generic, lab, trade names), derivatives are searched in the /RN field.
## 40 Search by patent classification

### 40.1 Classification fields

<table>
<thead>
<tr>
<th>Databases</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All</strong></td>
<td>IPC**</td>
<td>IPC, IPC.TAB</td>
<td>International Patent Classification (IPC1–8) Thesaurus and range-searchable Action date, YYYYMMDD IPC, Version (1–7 or date if IPC 8)</td>
</tr>
<tr>
<td></td>
<td>IPC.ACD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IPC.VER</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IPCI***</td>
<td>IPCI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IPCR***</td>
<td>IPCR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IPC.KW</td>
<td>IPC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC</td>
<td>IC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ICM****</td>
<td>ICM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ICS****</td>
<td>ICS</td>
<td></td>
</tr>
<tr>
<td>DWPI</td>
<td>IPCREF</td>
<td>IPC, IPC.TAB, IPC.TAB.M, IPCI, IPCR</td>
<td>International Patent Classification (IPC8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA, DWPI, EFPULL, FRANCEPAT, INPADOCDB, INPAFAMDB, PATDPA, PATDPAFULL, PCTFULL</td>
<td>ICA</td>
<td>ICA</td>
<td>IPC, Additional, (IPC1–7) (Feld bleibt erhalten und wird mit IPC 8 teilweise noch ausgefüllt)</td>
</tr>
<tr>
<td></td>
<td>ICI</td>
<td>ICI</td>
<td>IPC, Index (ICI nicht in FRANCEPAT), (IPC1–7), (Feld bleibt erhalten und wird mit IPC8 nicht mehr ausgefüllt)</td>
</tr>
<tr>
<td>DWPI, EFPULL, FRANCEPAT, FRFULL, GBFULL, KOREAPAT, PATDD, PATDPA, PATDPAFULL, PCTFULL, RUSSIAPAT, USPATFULL, USPAT2</td>
<td>MGR</td>
<td>--</td>
<td>Main Group</td>
</tr>
<tr>
<td></td>
<td>SGR</td>
<td></td>
<td>Subgroup</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(for range searching, no longer useable from IPC 8)</td>
</tr>
<tr>
<td>CA, DWPI, IFIALL, INPADOCDB, INPAFAMDB, USPATFULL, USPAT2, USPATOLD</td>
<td>NCL,</td>
<td>NCL</td>
<td>US Patent Classification USCL, current (NCLM and NCLS)</td>
</tr>
<tr>
<td>DWPI, IFIALL, INPADOCDB, INPAFAMDB, USPATFULL, USPAT2, USPATOLD</td>
<td>NCLM,</td>
<td>NCLM</td>
<td>US Patent Classification USCL, Main</td>
</tr>
<tr>
<td></td>
<td>NCLS,</td>
<td>NCLS</td>
<td>US Patent Classification USCL, Secondary</td>
</tr>
<tr>
<td>CA, DWPI, IFIALL, INPADOCDB, INPAFAMDB, USPATFULL, USPAT2, USPATOLD</td>
<td>INCL</td>
<td>INCL</td>
<td>US Patent Classification USCL, issued (INCLM and INCLS)</td>
</tr>
<tr>
<td>DWPI, IFIALL, INPADOCDB, INPAFAMDB, USPATFULL, USPAT2, USPATOLD</td>
<td>INCLM</td>
<td>INCLM</td>
<td>US Patent Classification USCL, issued, Main</td>
</tr>
<tr>
<td></td>
<td>INCLS</td>
<td>INCLS</td>
<td>US Patent Classification USCL, issued, Secondary</td>
</tr>
<tr>
<td></td>
<td>CPC.KW</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CPC.VER</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CPC.ACD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUPATFULL, CANTPATFULL, CNFULL, DEFULL, DWPI, FRFULL, GBFULL, INFULL, INPADOCDB, INPAFAMDB, JPFULL, PCTFULL, RDISCLOSURE</td>
<td>EPC (ECLA, EPLCA)</td>
<td>EPC (ECLA, EPLCA)</td>
<td>European Patent Classification European Patent Classification, Keyword</td>
</tr>
<tr>
<td></td>
<td>EPC.KW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>EPC (ECLA, EPLCA)</td>
<td>EPC (ECLA, EPLCA)</td>
<td>European Patent Classification and ICO classification</td>
</tr>
<tr>
<td>AUPATFULL, CANTPATFULL, DWPI, FRFULL, GBFULL, INFULL, INPADOCDB, INPAFAMDB, JPFULL</td>
<td>ICO</td>
<td>ICO</td>
<td>Patent Classification of the EPO: ICO Classification</td>
</tr>
<tr>
<td>AUPATFULL, CANTPATFULL, DWPI, INPADOCDB, INPAFAMDB</td>
<td>IDT</td>
<td>IDT</td>
<td>Old Dutch Patent Classification</td>
</tr>
</tbody>
</table>
### Types of search

<table>
<thead>
<tr>
<th>Databases</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>FTERM (FTCLA, JPCLA)</td>
<td>CLASS (FTERM, FTCLA, JPCLA)</td>
<td>Japanese Patent Classification (FTERM)</td>
</tr>
<tr>
<td>DWPI, INPADOCDB, INPAFAMDB</td>
<td>FCL (IPC), FMCL, FSCL, FICL, FACL FTM (FTERM, FTCLA, JPCLA)</td>
<td>FCL (IPC)</td>
<td>Japanese Patent Classification (FTERM)</td>
</tr>
<tr>
<td>DWPI</td>
<td>DC</td>
<td>DC</td>
<td>Derwent Classification Manual Codes (Electrical Indexing)</td>
</tr>
<tr>
<td>LITALERT</td>
<td>Patents: NCLR, NCLT Trademarks: TMCC, TMCT</td>
<td>NCLT</td>
<td>US Classification USCL</td>
</tr>
<tr>
<td>INPADOCDB, INPAFAMDB</td>
<td>LCL</td>
<td>LCL</td>
<td>Locarno Classification for US Design Patents</td>
</tr>
</tbody>
</table>

* Classification information is not available in these databases: DGENE, PCTGEN and IMSPATENTS.

** IPC is a Super Search Field and comprises these search fields: ICA, ICI, ICS, IPCI, IPCR. It should be preferred in all databases.

*** IPCI and IPCR are only display fields in DWPI.

**** In DWPI re-classification of the back-file/reload may affect the ICM or ICS fields. These fields should therefore not be used any more, even for publications before 2006.

No IPC8 codes available: PATDD

**Note:** IPC codes are occasionally provided later for PCT (WO) applications. If this is the case a code at Subclass level is assigned in DWPI and CA.

### 40.2 Principles underlying a patent classification system

(Source: [http://www.wipo.int/classifications/ipc/en/brochure/princip.htm](http://www.wipo.int/classifications/ipc/en/brochure/princip.htm))

‘In establishing a patent classification, two main approaches are traditionally distinguished.

‘Under one of the two approaches, inventions are classified according to the branches of industry, “art” or human activity to which they are characteristically relevant. This approach is usually termed “industry-oriented,” “art-oriented” or “application-oriented.” The former German Patent Classification, which had a certain influence on the IPC, employed this approach.

‘Under the other approach, inventions are classified according to the functions characterizing them. This approach is usually termed “function-oriented.” The United States of America and the United Kingdom patent classification systems are of this nature.

‘The two approaches can hardly be applied in their theoretical purity. Some functions are so characteristically, if not exclusively, relevant to certain branches of industry that it is natural to classify them under such branches. For example, spinning, weaving and knitting mainly concern textiles and it is only natural to regard them as mainly relevant to the textile industry. And indeed, they appear in the IPC under Section D (“Textiles; Paper”).

‘On the other hand, conveying, packing, storing, hoisting, lifting and hauling are functions which concern almost any branch of industry. Inventions relating to these functions lend themselves naturally to a “function-oriented” classification. And indeed, they appear in the IPC under Section B (“Performing Operations; Transporting”).

‘Although the IPC is in principle mainly function-oriented, it does, in fact, combine both approaches. It is the result of experience acquired by persons whose daily task consists in comparing inventions for which patent protection is claimed with similar inventions already disclosed in published patent documents. It is their judgment, based on such experience, which plays a decisive role in choosing, in each case, between the two approaches and in establishing the system.’
40.3 Searching the International Patent Classification (IPC)

In order to provide a tool for ordering world-wide patent publications into fields of technology and a tool for searching that is independent from languages the International Patent Classification (IPC) was published by WIPO in 1968 and revised every five years. It is used by all national and regional patent offices and WIPO.

From 1 January, 2006 the IPC was considerably extended and new regulations introduced (e. g. structure, classification rules, revisions, database updates). The 2012 version of the IPC has approximately 70,000 symbols to identify fields of technology, it is now being revised once every year, and the whole back-file gets re-classified in accordance with every new version. The IPC has eight sections:

<table>
<thead>
<tr>
<th>Section</th>
<th>Field of technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Human Necessities</td>
</tr>
<tr>
<td>B</td>
<td>Performing Operations; Transporting</td>
</tr>
<tr>
<td>C</td>
<td>Chemistry; Metallurgy</td>
</tr>
<tr>
<td>D</td>
<td>Textiles; Paper</td>
</tr>
<tr>
<td>E</td>
<td>Fixed Constructions</td>
</tr>
<tr>
<td>F</td>
<td>Mechanical Engineering; Lighting; Heating; Weapons; Blasting</td>
</tr>
<tr>
<td>G</td>
<td>Physics</td>
</tr>
<tr>
<td>H</td>
<td>Electricity</td>
</tr>
</tbody>
</table>

The sections are subdivided hierarchically: Class — Subclass — Group/Main Group — Subgroup. A symbol of the IPC is an alphanumerical code (i. e. consisting of letter and numbers). A patent on in-line skates (A63C 17/06) is codified like this:

- A63C 17/00 = Roller skates (Main Group)
  - A63C 17/04 = with wheels arranged otherwise than in two pairs (Subgroup, 1-point classification)
    - A63C 17/06 = single-track type (Subgroup, 2-point classification)

When searching every relevant subgroup must be considered individually. For example, a search by the main group does not automatically include all subgroups (1 point, 2 point, 3-point, etc.) that are in the hierarchy below that main group.

More than one IPC symbol may be assigned to a single patent application.

Note: From 2006 to 2010 the IPC was divided into a Core and an Advanced Level, which can still be seen on publications and sometimes in databases. In 2011 this distinction was dropped. In the text below there may still be references to these levels. They can only be removed once the databases have been adapted.

The IPC is provided with convenient search tools in various databases or by the patent offices through the Internet:

- http://www.wipo.int/classifications/ipc/ipc8/

The Internet version includes additional information: additional definitions, chemical structures, illustrations, references.

A revision of the IPC is announced by WIPO six months in advance.

From 2006, with IPC revision 8, the classification concept was changed:
Old concept: Patent publications are assigned a main IPC code which identifies the invention in its key aspect as described in the main claim. This main IPC code is printed in bold on the publication’s title page. Where appropriate, further secondary IPC codes are assigned which refer to further aspects of the invention. Therefore, in patent databases a distinction is made between the Main IPC (ICM field) and the Secondary IPC (ICS field). The combined ICM and ICS fields can be searched and displayed together in the IC field. Some patent offices assign Additional IPCs (ICA field) and Index IPCs (ICI field) which provide further information on the contents of the publication. On the printed publication these IPC codes are separated from the Main and Secondary IPC codes by a double forward slash, //. Documents already available in the patent databases are usually not reclassified.

A printed IPC code is according to this pattern:

ANNAnnN/NNnnn
A: Letter
N: Number
n: Number, optional; if these positions are not required they are not printed (no leading/trailing zeroes)

<table>
<thead>
<tr>
<th>Section</th>
<th>Class</th>
<th>Subclass</th>
<th>Group</th>
<th>Subgroup</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>NN</td>
<td>A</td>
<td>nnN</td>
<td>/ NNnnn</td>
</tr>
<tr>
<td>A-H</td>
<td>01-99</td>
<td>A-Z</td>
<td>1-999</td>
<td>/ 00-9999</td>
</tr>
</tbody>
</table>

New concept: IPC codes (one or more) are assigned that characterise the core of the invention (Invention IPC). For this, the full document is considered, not only the claims. In addition non-invention (‘additional’) IPC codes are assigned. The IPC codes are printed on the publication in accordance with WIPO ST.10/C like this:

- Italic: All (Advanced Level Codes / Full version 2006-2010)
- Non-italic = Core Level Codes / Basic version (2006-2010)
- Bold = Invention IPC
- Non-bold = non-invention IPC

Document (fictitious), with revision indicator:
A printed IPC code is according to this pattern:

\[
\text{ANNAnnnN/NNnnnn}
\]

- **A**: Letter
- **N**: Number
- **n**: Number, optional; if these positions are not required they are not printed (no leading/trailing zeroes)

<table>
<thead>
<tr>
<th>Section</th>
<th>Class</th>
<th>Subclass</th>
<th>Group</th>
<th>Subgroup</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>NN</td>
<td>A</td>
<td>nnnN</td>
<td>NNnnnn</td>
</tr>
<tr>
<td>A-H</td>
<td>01-99</td>
<td>A-Z</td>
<td>1-9999</td>
<td>00-99999</td>
</tr>
</tbody>
</table>

The revision indicator on the printed publication has this format:

\[(YYYY.MM)\]

- **YYYY**: Year
- **MM**: Month

The data of the patent offices include other information that can be entered in the databases.

Existing documents in the databases are continuously revised to the current revision of the IPC.

### 40.3.1 Re-classification

#### 40.3.1.1 Reference database MCD

When the back-file is re-classified or during a later re-classification due to revisions of the IPC only one member of the patent family is re-classified. The new classification is then transferred to the other members of the patent family.

The basis of this procedure is the MCD classification (MCD = Master Classification Database, reference database).

The patent families are found by their priority data (simple family concept).

Every database producer decides how this re-classification is considered in the database.

#### 40.3.1.2 STN’s strategy: Back-file, patent publications before 2006

All old codes (IPC1-7) are retained in all the patent databases, so are the search and display fields (ICM, ICS, ICA, ICI, IC). These fields can still be used to search the back-file.

The re-classified data of the back-file are currently entered in these databases: AUPATFULL, CANPATFULL, CAPLUS, CNFULL, DWPI, FRFULL, GBFULL, INFULL, INPADOCDB, INPAFAMDB, JPFULL, PCTFULL, USPATFULL, USPAT2, USPATOLD.

#### 40.3.1.3 STN’s strategy: New patent publications from 2006

The IPC8 is introduced in all of the patent databases. New search and display fields are introduced for the codes and the additional information.

If for a new patent publication both original IPC8 data (i.e. codes assigned by the patent office) and re-classified IPC8 data are available both the original data and current IPC8 codes will be entered in separate fields. The re-classified codes will be overwritten each time the classification is revised.

### 40.3.2 IPC Search Fields

Two IPC search fields were introduced:

- All types of IPC codes (editions 1 to 8) can be searched in the IPC field.
- The IPC.KW field contains standardised keywords specifying the origin of both old and new IPC codes.

Both search fields should be linked with (S) proximity:

\[=> \text{FIL EPFULL}\]
\[=> \text{S A47L0013-20/IPC}\]
Types of search

A search just in the IPC fields yields the biggest answer set. To limit to a certain origin (see table below) the IPC.KW field is used with (S) proximity.

<table>
<thead>
<tr>
<th>From field / Indicator</th>
<th>Entry in IPC.KW</th>
<th>Code in IPC.KW</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes of IPC1–7 Codes</td>
<td>MAIN</td>
<td>ICM</td>
<td>Main classification, not assigned any longer</td>
</tr>
<tr>
<td></td>
<td>SECONDARY</td>
<td>ICS</td>
<td>Secondary classification, not assigned any longer</td>
</tr>
<tr>
<td></td>
<td>ADDITIONAL</td>
<td>ICA</td>
<td>Additional classification, not assigned any longer</td>
</tr>
<tr>
<td></td>
<td>INDEX</td>
<td>ICI</td>
<td>Index classification, not assigned any longer</td>
</tr>
<tr>
<td>Status of IPC codes (STAT)</td>
<td>INITIAL</td>
<td>IPC</td>
<td>To identify the original entry, re-classification, deleted entries, etc.</td>
</tr>
<tr>
<td></td>
<td>RECLASSIFICATION</td>
<td>IPCR, R</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CURRENT</td>
<td>CUR</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ORIGINAL</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>Level of IPC8 codes (LEVEL)</td>
<td>CORE</td>
<td>C</td>
<td>Level of the classification</td>
</tr>
<tr>
<td></td>
<td>ADVANCED</td>
<td>A</td>
<td>(Offices assigning Advanced-Level codes mark all codes with A, even if a Core-Level code was assigned)</td>
</tr>
<tr>
<td></td>
<td>SUBCLASS</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>Position of the IPC8 codes (POS)</td>
<td>FIRST</td>
<td>F</td>
<td>Position of the codes on the printed document. First (Main) classification, Later (Secondary or Additional) classification *</td>
</tr>
<tr>
<td></td>
<td>LATER</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td>Value (INV)</td>
<td>INVENTION</td>
<td>I</td>
<td>To identify invention or non-invention (additional) information.</td>
</tr>
<tr>
<td></td>
<td>NON-INVENTION</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>How was the code assigned (SOURCE, ASSIGNMENT)</td>
<td>HUMAN</td>
<td>(none)</td>
<td>To identify codes assigned by a person (examiner) (also entered if the IPC code was assigned through a concordance list – see US).</td>
</tr>
<tr>
<td></td>
<td>MACHINE</td>
<td>(none)</td>
<td>To identify codes transferred from a document with the same priority**, Rolled-Up Core (in INPADOCDB, INPAFAMDB, CA, etc.)</td>
</tr>
<tr>
<td></td>
<td>SOFTWARE</td>
<td>(none)</td>
<td>To identify codes assigned by a classification software, i.e. a computer program assigned this IPC code</td>
</tr>
<tr>
<td>Generating Office (CC)</td>
<td>EP</td>
<td></td>
<td>Country code of the patent office (two-letter code + name)</td>
</tr>
<tr>
<td></td>
<td>DE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WO, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (CC)</td>
<td>98</td>
<td>Codes assigned through Rolled-Up Core (DWPI)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RC</td>
<td>Codes assigned through Rolled-Up Core (INPADOCDB, INPAFAMDB, CA, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>99</td>
<td>Codes assigned by Derwent/Thomson Scientific at Subclass Level if no or no valid IPC codes were available (DWPI)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BASIC</td>
<td></td>
<td>Codes from the Basic (DWPI)</td>
</tr>
</tbody>
</table>

* According to WIPO it is only recommended to place the code for the main aspect in the first position, but this is not mandatory — contrary to IPC1-7, i.e. not all patent offices adhere to this rule.

** Rolled-Up Core codes from Derwent (98/IPC.KW) have HUMAN in this position if the data are original (other databases show MACHINE in this case)

If the IPC code is entered in old format it will be edited automatically:

=> S A47L0013-20/IPC

L2 202 A47L013-20/IPC (A47L0013-20/IPC)

In addition to the full IPC, the following abbreviated forms are entered into the index of the database so that a truncation at this search level as a rule is not necessary (an error may occur if truncation is used in connection with an IPC7 code):

A47L0013/IPC
A47L/IPC
Truncation by ! is only required at still higher levels, e.g. search for class A47: S A47!/IPC, for section A: S A!!!/IPC. The latter should usually be avoided: To narrow a search to a particular subject field other SEARCH fields are more appropriate in most cases (e.g. the File Segment /FS field in DWPI).

40.3.3 IPC Thesaurus

The International Patent Classification is available in many STN patent databases with full title in English as an online thesaurus (from the introduction of edition 8). Search is possible with catchwords (Relationship Operator +KT). The IPC field holds the classification codes and catchwords of the current edition of the IPC (edition 8). To access earlier editions the number of the desired edition must be appended to the field code, e.g. /IPC5. Catchwords are available from edition 5.

These Relationship Codes can be used for SEARCH and EXPAND:

- Full class title (+INDEX).
- Full class title and IPC edition (+ED)
- Full class title and broader terms (+TI)
- Narrower terms (+NT), Related terms (+RT), Broader terms (+BT) or Hierarchy (+HIE)
- Browse (+BRO) the full class; (+BROS) – 5 Broader and 5 Narrower terms; browse forward and backward (+NEXT (n), +PREV (n))
- Keyword terms (+KT)
- All related terms (+ALL)
- All Advanced Level (+ADV)
- All corresponding Core Level (+COR)

Here are some applications:

- Hierarchical search of the IPC at all hierarchy levels
- Simple query of defined IPC ranges
- Correlation of Advanced Level and Core Level codes is displayed in the IPC8 thesaurus
- Identification of suitable IPC codes through a catchword search

The main on-line aids are: HELP THESAURUS (Thesaurus contents) and HELP RCODES (meaning and application of Relationship Codes).

40.3.3.1 Limiting to invention information

One important limiting option is to search by IPC for invention information. For old IPC codes (editions 1 to 7) the attributes ICM and ICS are available and for new IPC 8 codes INVENTION or I, all in the IPC.KW field:

```
=> FIL INPADOCDB
=> S G02C0005-08/IPC(S)(I OR ICM OR ICS)/IPC.KW
  467 G02C0005-08/IPC
  46889478 I/IPC.KW
  37020372 ICM/IPC.KW
  17720910 ICS/IPC.KW
L7  467 G02C0005-08/IPC(S)(I OR ICM OR ICS)/IPC.KW
```

The search query may be limited to the IPC8 attribute for the SDI search profile:

```
=> S G02C0005-08/IPC(S)(I)/IPC.KW  
  467 G02C0005-08/IPC 
  46889478 (I)/IPC.KW 
L8  416 G02C0005-08/IPC(S)(I)/IPC.KW 
```

40.3.3.2 Limiting to Main IPC codes

In the old IPC system all patent publications had one Main IPC code. In the new IPC system there is no Main IPC code any longer; however, the patent offices have the option to assign either a FIRST or a LATER attribute to each
Types of search

invention IPC code. Use and actual meaning of FIRST depends on the individual patent office and is only roughly comparable to that of a Main IPC code.

=> S G02C0005-08/IPC (S) (F OR ICM) /IPC.KW
   467 G02C0005-08/IPC 21294704 F /IPC.KW
   37020372 ICM/IPC.KW
   L9 299 G02C0005-08/IPC (S) (F OR ICM) /IPC.KW

40.3.4 Search Strategy

In many cases it is useful to link the result of an IPC search with that of a search by free text. In order to obtain a comprehensive search result different variations of text and IPC queries and their linking should be employed and the partial results be combined by OR. This strategy is shown in the search examples on search by subject.

40.3.5 IPC display

The IPC display field shows all IPC details (old and new classification) of a document; the attributes are displayed in brackets. The IPC field combines the IPCI (original IPC8 data) and IPCR (latest re-classified IPC data) fields.

Use the command SET ICFORMAT ON to display even the old IPC in the new format:

=> SET ICFORMAT ON
SET COMMAND COMPLETED

Always use this command before performing any IPC-based analyses.

Here is a document from 2006 with its IPC data:

=> D PI IPC
L1 ANSWER 1 OF 1 INPADOCDB COPYRIGHT 2013 EPO/FIZ KA on STN
PI EP 1628341 A2 20060222
PI EP 1628341 A3 20070919
IPCI H01L0021-8247 [I,A]; H01L0027-22 [I,A]

Here is a document before 2006 with its IPC data:

=> D PI IPC
L2 ANSWER 1 OF 1 INPADOCDB COPYRIGHT 2013 EPO/FIZ KA on STN
PI IT 9020727 D0 19900622
PI IT 9020727 A1 19911223
PI IT 1248974 B 19950211
ICM B42D
IPCI G06K0019-08 [I,A]; B42D [I,S]
IPCR D21H0021-48 [I,A]; G06K0019-12 [I,A]; G07D0007-04 [I,A];
G07F0007-08 [I,A]
IPCR D21H0021-48 [I,A]; G06K0019-12 [I,A]; G07D0007-04 [I,A];
G07F0007-08 [I,A]

The introduction of re-classification data for the back-file, as e.g. in INPADOCDB, INPAFAMDB, offers considerable advantages for searching. The example above gives a good impression of how much different re-classification data and original IPC data may prove. In this case of a patent publication from Italy, which was originally issued with an IPC code at subclass level only, the IPC codes made available through re-classification are much more detailed. Re-classification thus offers a much better chance of finding more relevant documents. It also levels out different classification practices of the various patent offices.

Depending on the amount of information displayed the IPC display field may be free (e.g. in INPADOCDB, INPAFAMDB) or charged (HCAPLUS).

=> FIL HCAPLUS

=> D IPC

L3 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2011 ACS on STN
CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
-------------- -------------------------------
US 20040040574 IPCI B08B0019-00 [ICM,7]; B08B0001-70 [I,C]
     IPCR A47L0007-00 [I,C]; A47L0013-07 [I,A]; A47L0013-10
Guide to STN Patent Databases

[1, C*]; A47L0013-20 [1, C*]; A47L0013-20 [1, A]; A47L0013-22 [1, A]; A47L0013-51 [1, A]; B08B0001-00 [1, C*]; B08B0001-00 [1, A]

WO 2004020117 IPCR A47L0013-16 [1, C*]; A47L0013-17 [1, A]; A47L0013-10 [1, C*]; A47L0013-20 [1, C*]; A47L0013-20 [1, A]; A47L0013-22 [1, A]; A47L0013-51 [1, A]; B08B0001-00 [1, C*]; B08B0001-00 [1, A]

AU 2003262890 IPCI B08B0007-00 [1CM, 7]; B08B0003-00 [1CS, 7]
IPCR A47L0013-16 [1, C*]; A47L0013-17 [1, A]; A47L0013-10 [1, C*]; A47L0013-20 [1, C*]; A47L0013-20 [1, A]; A47L0013-22 [1, A]; A47L0013-51 [1, A]; B08B0001-00 [1, C*]; B08B0001-00 [1, A]

CN 1697710 IPCI B08B0007-00 [1CM, 7]; B08B0003-00 [1CS, 7]
IPCR A47L0013-16 [1, C*]; A47L0013-17 [1, A]; A47L0013-10 [1, C*]; A47L0013-20 [1, C*]; A47L0013-20 [1, A]; A47L0013-22 [1, A]; A47L0013-51 [1, A]; B08B0001-00 [1, C*]; B08B0001-00 [1, A]

JP 2005537055 IPCI A47L0013-17 [1CM, 7]; A47L0013-22 [1CS, 7]
US 20050183742 IPCI A47L0013-20 [1CM, 7]
IPCR A47L0013-10 [1, C*]; A47L0013-20 [1, C*]; A47L0013-20 [1, A]; A47L0013-51 [1, A]

The IPC.TAB format displays a table with detailed IPC data. Again, the charges depend on the database used:

=> D IPC. TAB

L1 ANSWER 1 OF 1 INPADOCDB COPYRIGHT 2011 EPO/FIZ KA on STN

<table>
<thead>
<tr>
<th>CODE</th>
<th>VERSION</th>
<th>POS</th>
<th>INV</th>
<th>LEVEL</th>
<th>CC</th>
<th>ASSIGNMENT DATE</th>
<th>STAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

40.3.6 Notes on DWPI

The fields shown in the Classification fields table above are those at the invention level of DWPI and partly of the publication level. To limit a search e.g. to the invention level the command would be:

=> S B08B0001-00/IPC (L) INVENTION/ DLVL

These fields are available only at publication level:

<table>
<thead>
<tr>
<th>DWPI (Publication level only)</th>
<th>IPC.TAB.M</th>
<th>Initial IPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIC, IICA, IICI, IICM, ICICS</td>
<td>IIC, IICA, IICI, IICM, ICICS</td>
<td>US Classification</td>
</tr>
<tr>
<td>IPC.ACD</td>
<td>INCL, INCLM, INCLS</td>
<td></td>
</tr>
</tbody>
</table>

IPC data at invention level:

- Search an display options are retained for IPC1–7
- Only current IPC8 data are displayed (IPCI and IPCR), re-classification is considered
- No display of Assignment Attributes

IPC data at publication level:

- IPC of the original, IPC1–7 (IICM, ICICS, ...) and IPC8 (IPCI)
- Re-classified IPC (IPCR) for the publication
- Display of Assignment Attributes

All IPC codes (IPC1–8) can be searched with the /IPC search field.
40.3.6.1 IPC8

The same search and display fields are available as in the other patent databases. There is a special display format, IPC.TAB.M, to display a full IPC8 table at publication level:

```plaintext
=> D IPC.TAB.M
```

<table>
<thead>
<tr>
<th>Member (0001)</th>
<th>VERSION</th>
<th>POS</th>
<th>INV</th>
<th>LEVEL</th>
<th>CC ASSIGNMENT</th>
<th>DATE</th>
<th>STAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPCI A63C0017-00</td>
<td>(2006)</td>
<td>L</td>
<td>N</td>
<td>Core</td>
<td>98 Human</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>IPCI A63C0017-04</td>
<td>(2006)</td>
<td>F</td>
<td>I</td>
<td>Core</td>
<td>98 Human</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>IPCI A63C0017-06</td>
<td>(200601)</td>
<td>F</td>
<td>I</td>
<td>Advanced</td>
<td>GB Human</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>IPCI A63C0017-14</td>
<td>(200601)</td>
<td>L</td>
<td>N</td>
<td>Advanced</td>
<td>GB Human</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>IPCI A63C0017-22</td>
<td>(200601)</td>
<td>L</td>
<td>N</td>
<td>Advanced</td>
<td>GB Human</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

A search with IPC8 codes can be linked to the /IPC.KW field to limit it. With a few exceptions, the same attributes are used as in other databases:

<table>
<thead>
<tr>
<th>From field / Indicator</th>
<th>Entry in IPC.KW</th>
<th>Code in IPC.KW</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status of IPC codes (STAT)</td>
<td>INITIAL</td>
<td></td>
<td>To identify initial entries, re-classification, deleted entries, etc.</td>
</tr>
<tr>
<td></td>
<td>RECLASSIFICATION</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ORIGINAL</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>Other (CC)</td>
<td></td>
<td>98</td>
<td>Rolled-Up Core created by Thomson Scientific (labelled as HUMAN for the original data—labelled as MACHINE in INPADOCDB, INPAFAMDB)</td>
</tr>
<tr>
<td></td>
<td>99</td>
<td></td>
<td>Code at subclass level assigned by Derwent/Thomson Scientific if no or no valid IPC codes are available</td>
</tr>
<tr>
<td>BASIC</td>
<td></td>
<td></td>
<td>Codes from the Basic</td>
</tr>
</tbody>
</table>

```plaintext
=> S A63C0017-06/IPC(S)BASIC/IPC.KW
L4 524 A63C0017-06/IPC(S)BASIC/IPC.KW
```

```plaintext
=> D 100 BIB IPC MEMB
```

| AN | 2002-259067 [31] WPIINDEX |
| DNN | N2002-200779 [31] WPIINDEX |
| TI | Roller skate comprises shoe and wheel body, with foot front and heel components, heel component having at least two projections |
| DC | P22; P36 |
| IN | SHIH F C |
| PA | (SHIH-I) SHIH F C |
| CYC | 4 |
| PLA | DE 20117176 U1 20020314 [200231]* DE 11[5] |
| | GB 2380947 A 20030425 [200332] # FR |
| | GB 2380947 A 20030910 [200360] # EN |
| PRAI | DE 2001-20117176 20011019 |
| IC | ICM A63C0001-04; A63C0017-04; A63C0017-06; A63C0017-20 |
| ICS | A43B0005-16; A63C0001-02 |
Guide to STN Patent Databases

Member(0001)
PI DE 20117176 U1 20020314 (200231)* DE 11[5] A63C-17/06
TID Rolllschuh
AG AG T Beck & Roessig - European Patent Attorneys, 81541 Muenchen
PA (SHIH-F C) SHIH F C
PAO: Shih, Fang Chuan
PAA: Taichung, TW
ADT DE 20117176 U1 DE 2001-20117176 20011019
APTS DE2001-200017176 U
IC ICM A63C0017-06
IIC ICM A63C0017-06
CLMDE 1. Rollschuh, umfassend einen Schuh (40) und einen Radkoerper, gekennzeichnet durch: ein Fussspitzenelement (70) und ein Fersenelement (80), die an einem vorderen Endabschnitt und einem hinteren Endabschnitt des Schuhs (40) angeordnet sind, wobei das Fersenelement (80) wenigstens zwei Vorspruenge (84) aufweist, die in Eingriff mit dem Schuh (40) stehen, eine Sicherungseinrichtung (13, 14), welche einen vorderen Abschnitt des Radkoerpers und das Fusspfzelement (70) miteinander koppelt, um den vorderen Abschnitt des Schuhs (40) zwischen dem Fusspfzelement (70) und dem Radkoerper festzulegen, und Verriegelungselemente (20), welche einen hinteren Abschnitt des Radkoerpers und das Fersenelement (80) losbar miteinander verriegeln, um den hinteren Abschnitt des Schuhs (40) zwischen dem Fersenelement (80) und dem Radkoerper festzulegen.

Member(0002)
PI GB 2380947 A 20030423 (200330) A63C-17/20
IN SHIH-F C
PA (SHIH-F C) SHIH F C
PAO: FW, TW
ADT GB 2380947 A GB 2001-24795 20011016
APTS GB2001-24795 20011016
PRTS GB2001-24795 20011016
IC ICM A63C0017-20
IIC ICM A63C0017-20

Apart from the other IPC fields that were introduced in all databases with the IPC8 reform there is the /IPC.REF search field which can be used to search all IPC8 codes both at Invention Level and at Publication Level.

=> S A63C0017-06/IPC.REF
L3 27 A63C0017-06/IPC.REF

=> D L3 IPC

L3 ANSWER 1 OF 27 WPINDEX COPYRIGHT 2006 THE THOMSON CORP on STN
IPCI A63C0017-00 [N,C]; A63C0017-04 [I,C]; A63C0017-06 [I,A]; A63C0017-14 [N,A]; A63C0017-22 [N,A]

The IPC thesaurus works in the same way as in the other patent databases.

40.3.6.2 RD documents (Research Disclosure)

Derwent/Thomson Scientific creates an IPC code (Subclass) for these documents:

- Document with IPC7:
  L1 ANSWER 1 OF 1 WPINDEX COPYRIGHT 2013 THOMSON REUTERS on STN
  AN 2000-504373 [200045] WPINDEX
  DNN N2000-372930 [200045]
  TI Dual GMR sensor with canted pinned magnetization to achieve near zero symmetry of the read signal
  DC T03; U12; V02
  PA (IBM-C) INT BUSINESS MACHINES CORP
  CYC 1
  PI RD 432135 A 20000410 (200045)* EN 1[1] <-
  ADT RD 432135 A RD 2000-432135 20000320
  PRAI RD 2000-432135 20000320
  IC ICM G11B0000-00
40.3.7  Range search with /MGR and /SGR

Some databases (see above) provide the option of searching entire ranges of the IPC (editions 1 to 7 only) using the /MGR and /SGR search fields. With the introduction of the IPC thesaurus this option has become obsolete; in INPADOCDB and INPAFAMDB this type of range search has been abandoned.

In this case, the subgroup (field /SGR) must consist of five digits with zeros filled on the right side.

This option should be used in particular when setting up SDI profiles. In an on-line search the searching time may become so long that it is quicker to enter individual IPC codes, in particular when using a script.

Depending on the database, different proximity operators must be used (various operators may work):

- (S) Proximity: in FRFULL, KOREAPAT, PATDD, PATDPA, PATDPAFULL, PCTFULL, USPATFULL, USPAT2
- (T) Proximity: in EPFULL, FRANCEPAT, FRFULL, JAPIO, PATDPA, PATDPAFULL
- (L) Proximity: in PATDPAFSC

In DWPI many documents do not have any data in the ICM and ICS fields. Thus, MGR and SGR should not be used for range searching any more but IPC8 range searching or the thesaurus should be preferred in DWPI.

40.4  Searching the Cooperative Patent Classification (CPC)

40.4.1  Introduction

The Cooperative Patent Classification (CPC) was developed and is being maintained in cooperation between the European Patent Office (EPO) and the US Patent and Trademark Office (USPTO). The system was introduced in January, 2013 and replaces the European classification systems ECLA and ICO and the national US Patent Classification, USPC.

In order to classify the subject matter of patent applications CPC codes have been assigned by examiners of the European Patent Office, the USPTO, and of national offices in ES, FI, GB, and SE since January, 2013. The codes are available on the day of publication for all EP and US documents, for PCT documents where the EPO is the International Search Authority (ISA) and for documents classified by the national offices above. For publications from all other countries where the classification is assigned by the EPO (including the PCT minimum documentation) the CPC codes are available approximately 6 months after publication of the documents. The CPC codes are used in databases only. Only IPC codes are printed on publications as before. Definitions and concordances (ECLA-CPC, IPC-CPC) are published by the EPO on:
Guide to STN Patent Databases

- CPC Scheme and Definitions:
  http://www.cooperativepatentclassification.org/deliverables/cpcSchemeAndDefinitions.html
- CPC Concordances:
  http://www.cooperativepatentclassification.org/deliverables/cpcConcordances.html

The USPTO has a transition period until December, 2014. During this period, codes are assigned as follows:

- New US patent applications are assigned both USPC and CPC codes
- Granted US patents are assigned either USPC or both USPC and CPC codes
- CPC codes are printed on the publications in addition to IPC and USPC codes

From 2015 the USPTO will use the CPC only (Plant and Design Patents exempt).

The CPC is continuously revised by both offices, documents are re-classified according to the latest revisions in the databases.

### 40.4.2 The structure of the CPC

The CPC is a classification system based on the IPC having approximately 250,000 classification codes. It comprises the former EPC and ICO codes, additional codes for business methods (G06Q) and specific aspects of the USPC. The CPC has the sections A to H plus an extra section Y for new technologies and technologies overlapping multiple sections. The groups a finer than those of the IPC. Up to 6 digits for subgroups may follow the slash /.

<table>
<thead>
<tr>
<th>A63C 17</th>
<th>Group</th>
<th>Roller skates; Skate-boards</th>
</tr>
</thead>
<tbody>
<tr>
<td>A63C 17/04</td>
<td>Subgroup</td>
<td>with wheels arranged otherwise than in two pairs (</td>
</tr>
<tr>
<td>A63C 17/05</td>
<td>Subgroup</td>
<td>Roller skis</td>
</tr>
<tr>
<td>A63C 17/06</td>
<td>Subgroup</td>
<td>single-track type</td>
</tr>
<tr>
<td>A63C 17/061</td>
<td>Subgroup</td>
<td>with relative movement of sub-parts on the chassis</td>
</tr>
<tr>
<td>A63C 17/062</td>
<td>Subgroup</td>
<td>......with a pivotal frame or cradle around transversal axis for relative movements of the wheels</td>
</tr>
<tr>
<td>A63C 17/063</td>
<td>Subgroup</td>
<td>......comprising steered wheels, i.e. wheels supported on a vertical axis</td>
</tr>
<tr>
<td>A63C 17/065</td>
<td>Subgroup</td>
<td>......(with movements during use of the foot plate or shoe relative to the chassis, e.g. inline clap skate)</td>
</tr>
<tr>
<td>A63C 17/066</td>
<td>Subgroup</td>
<td>......with adjustable position of the foot plate or shoe relative to the chassis</td>
</tr>
<tr>
<td>A63C 17/068</td>
<td>Subgroup</td>
<td>......Production or mounting thereof</td>
</tr>
<tr>
<td>A63C 17/069</td>
<td>Subgroup</td>
<td>......(Single-wheel type with single axis )</td>
</tr>
</tbody>
</table>

Curly brackets (…) denote either a title of a CPC group that does not exist in the EPC or text specific to the CPC that was added to the original title of an EPC group.

Existing documents in the databases are continuously revised in accordance with the latest version of the CPC.

### 40.4.3 Using CPC codes for searching

The format of the CPC codes, the CPC fields, and the CPC thesaurus are basically the same as those of the IPC. The CPC field can be searched by full code, at man group or at subclass level:

- $ A63C0017/06/CPC$  
- $ A63C0017/CPC $  
- $ A63C/CPC $  

Truncation should not be used. To search starting from a higher level of hierarchy always use the online thesaurus.

The CPC thesaurus (HELP THESAURUS) can be used to display the hierarchy of the CPC and to create a search using relationship codes:

- $ A63C0017/06/ +NT/ CPC $  

E1 3459 $ A63C0017/06/CPC $  

E2 93 NT1 A63C0017-061/CPC  
  with relative movement of sub-parts on the chassis (2013-01-01)  

E3 466 NT2 A63C0017-062/CPC  

220
Types of search

with a pivotal frame or cradle around transversal axis
for relative movements of the wheels (2013-01-01)

E4  269  NT2  A63C0017-064/CPC
comprising steered wheels, i.e. wheels supported on a
vertical axis (2013-01-01)

E5  305  NT1  A63C0017-065/CPC
CPC-specific-text: with movements during use of the foot
plate or shoe relative to the chassis, e.g. inline clap
skate (2013-01-01)

E6  136  NT1  A63C0017-065/CPC
with adjustable position of the foot plate or shoe
relative to the chassis (2013-01-01)

E7  235  NT1  A63C0017-068/CPC
Production or mounting thereof (2013-01-01)

E8  414  NT1  A63C0017-08/CPC

This table shows the CPC attributes and further search fields:

<table>
<thead>
<tr>
<th>CPC-Attribute</th>
<th>Search terms</th>
<th>Search fields</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>classification value</td>
<td>I, invention</td>
<td>/CPC.KW</td>
<td>I = Main aspects of the invention;</td>
</tr>
<tr>
<td></td>
<td>A, additional</td>
<td></td>
<td>A = Additional aspects of the invention</td>
</tr>
<tr>
<td>classification status</td>
<td>O, original, initial</td>
<td>/CPC.KW</td>
<td>New documents or documents from the backfile of INPADOC have the attribute “O” (original)</td>
</tr>
<tr>
<td></td>
<td>R, reclassified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>source of classification</td>
<td>H, human</td>
<td>/CPC.KW</td>
<td>New documents or documents from the backfile of INPADOC have the attribute “H” (human)</td>
</tr>
<tr>
<td></td>
<td>M, machine</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G, generated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>generating office</td>
<td>ES, Fi, GB, SE</td>
<td>/CPC.KW</td>
<td>Available only for documents classified by ES, Fi, GB, or SE: Not available for documents classified by EPO or USPTO</td>
</tr>
<tr>
<td>position attribute</td>
<td>F, first</td>
<td>/CPC.KW</td>
<td>Denotes if the code is in first position or a later position (relevant for US documents)</td>
</tr>
<tr>
<td></td>
<td>L, later</td>
<td></td>
<td></td>
</tr>
<tr>
<td>version of the CPC</td>
<td>CCYYYMDD</td>
<td>/CPC.VER</td>
<td>Shows the CPC version (date is searchable)</td>
</tr>
<tr>
<td>action date</td>
<td>CCYYYMDD</td>
<td>/CPC.ACD</td>
<td>Shows the date when the code was assigned (date is searchable)</td>
</tr>
</tbody>
</table>

40.4.4 Displaying CPC codes

In INPADOCDB/INPAFAMDB the CPC codes are displayed de-duplicated in the CPC display field:

=> D TI PI PA IND

L6  ANSWER 1 OF 268 INPADOCDB COPYRIGHT 2013 EPO/FIZ KA on STN
P1  JP 05606374  A  19940721
P1  JP 32534232B  B2 20011204
ICM A63C0017-04
ICS A63C0005-035; A63C0017-22
IPCR A63C0005-035 [I,A]; A43B0005-16 [I,A]; A63C0017-00 [I,A]; A63C0017-04 [I,A]; A63C0017-06 [I,A]; A63C0017-22 [I,A]; G11B0005-035 [I,A]; G11B0005-09 [I,A]; G11B0005-10 [I,A];
CPC A63C0017-06; A43B0005-16B; A63C0017-06; A63C0017-226; G11B0005-035; G11B0005-09; G11B0020-1009; G11B0020-10046
EPC A63C0017-06; A43B0005-16A; A63C0017-06B; A63C0017-22D; G11B0005-035; G11B0005-09; G11B0020-10A; G11B0020-10A6
The full CPC information can be displayed with the CPC.TAB display format:

=> D CPC.TAB

In DWPI the codes are de-duplicated if they have the same attributes, so codes may be displayed more than once. In CAplus and USPATFULL/USPAT2 there are further display fields apart from CPC and CPC.TAB: CPC.UNIQ for de-duplicated display (if the display field CPC is used all codes are listed for every family member) and CPC.HIT to display CPC hit terms. CPC.TAB is charged in CAplus.

In other databases the codes are de-duplicated, as in INPADOCDB/INPAFAMDB.

40.4.5 Notes on searching by classification (CPC, EPC, USPC)

The EPC and ICO codes will be retained as historical data for a transition period. However, new or updated documents are not assigned EPC or ICO codes any more.

For a comprehensive search by classification it is advisable to use both CPC codes and USPC codes in parallel for a transition period of two years.

40.5 Searching classifications of the European Patent Office

When assigning classifications to the subject matter of a patent application the examiners at the European Patent Office used the European Patent Classification EPC (also known as ECLA) and an internal supplementary classification ICO (In Computer Only). Some old documents even contain IDT codes (Indeling der Techniek). The EPC has no longer been used since the introduction of the CPC in January, 2013.

40.5.1 European Patent Classification (EPC)

The European Patent Classification (EPC) is an extension to the International Patent Classification and was assigned by the EPO's patent examiners to EP publications and other publications used for examination. On STN the EPC is available with historical data in the CAPLUS, DWPI and AUPATFULL, CANPATFULL, CNFULL, GDFULL, GTFULL, INFULL, JPFULL, PCTFULL databases.

This example shows the IPC subclass H 04 L with its EPC extensions (bold italics):

<table>
<thead>
<tr>
<th>H04L</th>
<th>TRANSMISSION OF DIGITAL INFORMATION, e.g. TELEGRAPHIC COMMUNICATION (typewriters B4J); order telegraphs, fire or police telegraphs G08B; visual telegraphy G08B, G08C; teleautographic systems G08C; ciphering or deciphering apparatus per se G09C; coding, decoding or code conversion, in general H03M; arrangements common to telegraphic and telephonic communication H04M; selecting H04Q)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H04L001/00</td>
<td>Arrangements for detecting or preventing errors in the information received (correcting synchronisation H04L 7/00; for digital computers G06F 11/00; arrangements in the transmission path H04B)</td>
</tr>
<tr>
<td>H04L1/00A</td>
<td>• [N: Systems modifying transmission characteristics according to link quality (adaptive data allocation for multicarrier modulation H04L27/26M1A; controlling transmission power for radio systems H04B/005B)] [N9911]</td>
</tr>
<tr>
<td>H04L1/00A1</td>
<td>• • [N: by adapting the transmission rate] [N9911]</td>
</tr>
<tr>
<td>H04L1/00A1M</td>
<td>• • • [N: by switching between different modulation schemes] [N9911]</td>
</tr>
<tr>
<td>H04L1/00A3</td>
<td>• • [N: by adapting the transmission format] [N9911]</td>
</tr>
<tr>
<td>H04L1/00A3L</td>
<td>• • [N: by modifying the frame length] [N9911]</td>
</tr>
<tr>
<td>H04L1/00A5</td>
<td>• • [N: by adapting the channel coding] [N9911]</td>
</tr>
<tr>
<td>H04L1/00A7</td>
<td>• • [N: by adapting the source coding] [N9911]</td>
</tr>
<tr>
<td>H04L1/00B</td>
<td>• [N: by using error correcting codes (in general H03M 13/00)]</td>
</tr>
<tr>
<td>H04L1/00B1</td>
<td>• • [N: by using block codes]</td>
</tr>
</tbody>
</table>
The format of the EPC was streamlined with the IPC. Use the EXPAND command to find out about the format:

```plaintext
=> FIL INPADOCDB

=> E H04L/EPC

E#  FREQUENCY  AT   TERM
    --------------  ----  ------
E1     0       1   H04K0003-00 (C0608)/EPC
E2     0       0   H04K;/EPC
E3    648483   1651  H04L/EPC
E4     0       0   H04L;/EPC
E5    83888    1651  H04L0001/EPC
E6     1058    171   H04L0001-00/EPC
E7      7      41   H04L0001-00A/IDT/EPC
E8     2280    10    H04L0001-00A/EPC
E9     2977      9   H04L0001-00A1/EPC
E10    367       8   H04L0001-00A13/EPC
E11    415       8   H04L0001-00A13B/EPC
E12    115       8   H04L0001-00A13D/EPC

=> S E9
L1  2977  H04L0001-00A1/EPC

=> D EPC

L1  ANSWER 1 OF 2977  INPADOCDB COPYRIGHT 2011 EPO/FIZ KA on STN
EPC  H04L0001-18P;  H04L0001-00A1;  H04L0027-26M
```

EPC codes are available for all publications where the classification is assigned by the European Patent Office (PCT minimum documentation). This way about half of all documents are accessible using an EPC code.

### 40.5.1.1 Linked EPC

In the description of the EPC it is pointed out (see “Notes”) that more options are available for a more targeted EPC search. These additional limitations are appended to the EPC codes using a “+” sign. This type of search is called “Linked EPC” on STN.

Linked EPC are available in these databases: INPADOCDB, INPAFAMDB, DWPI and RDISCOURSE.

A “+” code is used with the EPC/ECLA to combine different aspects of the invention for indexing (see “Notes” in the description of the EPC). However, this is used only in certain fields of technology, mainly organic chemistry. Special indexing codes may be used, including ICO or IDT codes.

Examples: A “+M” code is used to index additional details of the invention. Compositions containing one or more active substances, e.g. formulations or synergistic mixtures, will have a “+M” code appended to the classification code, e.g. A01N0039/02 + M.

For example, in subclass C01G, and in particular the sub-groups C10G0009/00 to C10G0069/14, these “+” codes can be present:
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>+B</td>
<td>Obtained product gasoline</td>
</tr>
<tr>
<td>+D</td>
<td>Obtained product diesel oil</td>
</tr>
<tr>
<td>+G</td>
<td>Obtained product gasoil</td>
</tr>
<tr>
<td>+J</td>
<td>Obtained product jet fuel</td>
</tr>
<tr>
<td>+L</td>
<td>Obtained product lubricating oil</td>
</tr>
<tr>
<td>+L1</td>
<td>Obtained product electrical isolation oil</td>
</tr>
<tr>
<td>+L2</td>
<td>Obtained product white oil, eating oil</td>
</tr>
<tr>
<td>+R</td>
<td>Starting material Residues</td>
</tr>
<tr>
<td>+S</td>
<td>Obtained product Solvents</td>
</tr>
<tr>
<td>+X1</td>
<td>Obtained product C2-C4 olefins</td>
</tr>
<tr>
<td>+X2</td>
<td>Obtained product higher olefins</td>
</tr>
<tr>
<td>+X3</td>
<td>Obtained product acetylene and homologues</td>
</tr>
<tr>
<td>+Y1</td>
<td>Obtained product fuel gas</td>
</tr>
<tr>
<td>+Y2</td>
<td>Obtained product propane and butane</td>
</tr>
<tr>
<td>+Z</td>
<td>Obtained product aromatics</td>
</tr>
</tbody>
</table>

If EPC codes are used after the “+” symbol they are abbreviated in most cases. On STN these abbreviated codes are “reconstructed” in order to facilitate searching. In addition, all codes are made searchable in the /EPC.KW search field, which is linked to the /EPC search field by (S) proximity. Unfortunately, the spelling of the codes is not unambiguous. The various spellings can best be found with EXPAND:

```plaintext
=> E C10G0009-00/EPC 25
E1  198 C10G0009-12/EPC
E2  9523 C10G0009/EPC
E3  1900 -> C10G0009-00/EPC
E4  833 C10G0009-00+IDT/EPC
E5   13 C10G0009-00+L/EPC
E6    2 C10G0009-00+P/EPC
E7    1 C10G0009-00+R/EPC
E8   157 C10G0009-00+X1/EPC
E9    8 C10G0009-00+X1&AMP;Z/EPC
E10   2 C10G0009-00+X1X3Z/EPC
E11   3 C10G0009-00+X1Y1/EPC
E12   1 C10G0009-00+X1Z/EPC
E13   24 C10G0009-00+X2/EPC
E14    4 C10G0009-00+X2Z/EPC
E15   18 C10G0009-00+Y1/EPC
E16    7 C10G0009-00+Y1X1/EPC
E17   23 C10G0009-00+Z/EPC
E18   11 C10G0009-00+ZX1/EPC
E19   631 C10G0009-00C/EPC
E20   80 C10G0009-00C+X1/EPC
E21    9 C10G0009-00C+X3/EPC
E22    3 C10G0009-00C+X3X1/EPC
E23   13 C10G0009-00C+Y1+X1/EPC
E24  404 C10G0009-00L/EPC
E25   14 C10G0009-00L+R/EPC

=> E X1/EPC.KW
E1   5 V/EPC.KW
E2   11 X/EPC.KW
E3  2130 -> X1/EPC.KW
E4    5 X1&AMP;Y1/EPC.KW
E5   18 X1&AMP;Z/EPC.KW
E6   50 X1X2/EPC.KW
E7   13 X1X3/EPC.KW
E8    2 X1X3Z/EPC.KW
E9    3 X1Y/EPC.KW
E10   45 X1Y1/EPC.KW
E11   1 X1Y1Y2/EPC.KW
E12   1 X1Y1Z/EPC.KW

For the code C10G0009-00C+Y1+X1/EPC the following entries can be found in the search index:
C10G0009-00C+Y1+X1/EPC
C10G0009-00C/EPC
X1 / EPC.KW
X1 / EPC.KW
```
Types of search

The full code can be searched in these ways:

\[ => S \ C10G0009\cdot00C+Y1\cdotX1/EPC \]
\[ => S \ C10G0009\cdot00C/EPC(S)(Y1(S)\cdotX1)/EPC.KW \]

For abbreviated linked EPC codes the full EPC codes also are entered. For example, for the abbreviated code B01D0009-00B4+/00C6+/00E+/02 these full EPC codes are also searchable:

\[ B01D0009\cdot00B4+/00C6+/00E+/02 /EPC \]
\[ B01D0009\cdot00B4 /EPC \]
\[ B01D0009\cdot00C6 /EPC \]
\[ B01D0009\cdot00E /EPC \]
\[ B01D0009\cdot02 /EPC \]
\[ 00C6 /EPC.KW \]
\[ 00E /EPC.KW \]
\[ 02 /EPC.KW \]

40.5.2 ICO Classification

The ICO classification was newly introduced and offers additional potential for in-depth searching. The EPO uses ICO codes to index additional aspects of an invention.

Most ICO codes are similar to EPC codes; in place of A, B, C, D, E, F, G, H the letters K, L, M, N, P, R, S, T are used as the first letter.

ICO codes are standardised to IPC8 format, e.g. M12Q0001-68D4. In the INPADOC databases there are separate search and display fields for ICO codes (ICO). In the Chemical Abstracts the ICO codes can be searched and displayed in the EPC field (ECLA, EPCLA).

In 2004 additional codes Y01N… were introduced for nano-technology, e.g.:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y01N0002</td>
<td>Nanobiotechnology</td>
</tr>
<tr>
<td>Y01N0004</td>
<td>Nanotechnology for information processing, storage and transmission</td>
</tr>
<tr>
<td>Y01N0006</td>
<td>Nanobiotechnology for materials and surface science</td>
</tr>
<tr>
<td>Y01N0008</td>
<td>Nanobiotechnology for interacting, sensing or actuating</td>
</tr>
<tr>
<td>Y01N0010</td>
<td>Nanooptics</td>
</tr>
<tr>
<td>Y01N0012</td>
<td>Nanomagnetics</td>
</tr>
</tbody>
</table>

In 2010 additional codes Y02… were introduced for renewable energies, e.g.:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y02C0010-00</td>
<td>CO2 capture or storage (not used, see subgroups)</td>
</tr>
<tr>
<td>Y02C0010-02</td>
<td>Capture by biological separation</td>
</tr>
<tr>
<td>Y02C0010-04</td>
<td>Capture by chemical separation</td>
</tr>
<tr>
<td>Y02C0010-06</td>
<td>Capture by absorption</td>
</tr>
<tr>
<td>Y02C0010-08</td>
<td>Capture by adsorption</td>
</tr>
<tr>
<td>Y02C0010-10</td>
<td>Capture by membranes or diffusion</td>
</tr>
<tr>
<td>Y02C0010-12</td>
<td>Capture by rectification and condensation</td>
</tr>
<tr>
<td>Y02C0010-14</td>
<td>Subterranean or submarine CO2 storage</td>
</tr>
</tbody>
</table>

\[ => E Y02C/ICO \]

\[ E3   18969 \ldots Y02C/ICO \]
\[ E4   13170 Y02C0010/ICO \]
\[ E5   206 Y02C0010:02/ICO \]
\[ E6   3704 Y02C0010:04/ICO \]
\[ E7   3842 Y02C0010:06/ICO \]
\[ E8   5002 Y02C0010:08/ICO \]
\[ E9   1330 Y02C0010:10/ICO \]
\[ E10  1530 Y02C0010:12/ICO \]
\[ E11  1115 Y02C0010:14/ICO \]
\[ E12  6256 Y02C0020/ICO \]

\[ => S E6 \]
\[ L1   3704 "Y02C0010:04"/ICO \]

\[ => D TI IND \]

L1 ANSWER 1 OF 3704 INPADOCDB COPYRIGHT 2011 EPO/FIZ KA on STN
Guide to STN Patent Databases

The file banner of INPADOCDB, INPAFAMDB displays a link to the ICO classification, e.g.:
http://www.stn-international.de/ico_1102.html

40.5.3 The IDT (Indeling der Techniek) Classification

This IDT classification was used by the Institut International des Brevets (IIB) and served to develop the EPC. Many IDT codes were converted to EPC codes by the EPO. However, this was not possible in a few fields of organic chemistry (see HELP IDT).

Example from 12D:

IDT - 12D
XIDT - 012_D
GI - Clarification, séparation, filtration (filtres et filtres-presses).

Notes
A partir des 2 juillet 1976, 29 mars et 18 octobre 1979 et 8 avril 1983, la sous-classe 12 D est clôturée et remplacée par B01D, B01J et C01B.

Les groupes clôturés correspondent globalement aux groupes de B01D, B01J et C01B de la façon suivante:
12 D 25 : B01D 39/00
12 D 25 F : B01J 20/00
12 D 25 F 6 : B01J 20/10
12 D 25 F 6 E - E 2 : C01B 33/28B
12 D 25 F 6 E 2 A : C01B 33/28B2
12 D 25 F 6 E 2 B : C01B 33/28B4
12 D 25 F 6 E 2 B 1 : C01B 33/28B4B
12 D 25 F 6 E 2 B 2 : C01B 33/28B4D
12 D 25 F 6 E 2 C : C01B 33/28B6
12 D 25 F 6 E 2 D : C01B 33/28B8
12 D 25 F 6 E 2 E : C01B 33/28B10
12 D 25 F 6 E 2 F : C01B 33/28B12
12 D 25 F 6 E 2 G : C01B 33/28B14
Matériaux filtrants et leur épuration.

730/10831 - (C) IDT / EPO
AN - 010102
IDT - 12D25
XIDT - 012_D025
GI - Matériaux filtrants, adsorbants, accessoires pour filtres et échangeurs d’ions (VIDE).

Remarque
Les échangeurs d’ions contenant une partie minérale et une partie organique, p.ex. les phosphates contenant de l’acide citrique, acétates, etc. sont rangés dans la dernière place possible; donc dans le groupe des échangeurs organiques appropriés.

40.6 Searching the National Patent Classification (USPC)

The United States Patent and Trademark Office (USPTO) uses the national patent classification USPC (since 1830) and generates the notations of the IPC by a concordance list. Since this concordance list must map two classification systems to each other, which are very different in their structure, a correct IPC classification cannot always be relied upon. If US documents are searched, as far as possible the US classification (USPC) should be employed.

The USPC is revised frequently and the codes in the databases are constantly adapted to the current version.

As a consequence of the introduction of the Cooperative Patent Classification (CPC) in 2013 the USPC will be discontinued after a transition period of two years.
40.6.1 Hierarchical structure of the USPC

The USPC is a hierarchical system. It is made up of classes and subclasses. All documents are classified to subclass level.

<table>
<thead>
<tr>
<th>Class</th>
<th>Subclass</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>280</td>
<td>841</td>
<td>LAND VEHICLES SKATES</td>
</tr>
</tbody>
</table>

The Class is one of 450 main subdivisions. A class has a number and a title describing its meaning. The definitions and relations to other classes and subclasses are given. A class number consists of 1 to 3 digits, e.g. 280.

Subclasses have a number and a title, too. One or more periods in front of the title are used to indicate its position in the hierarchy. The position of a subclass in the hierarchy cannot be concluded from the number alone. The number of a subclass consists of up to 6 digits, e.g. 11212.

The US Classification has more definitions; the sections below are cited from this Internet source:

- [http://www.uspto.gov/web/offices/pac/dapp/sir/co/examhbk/five.htm](http://www.uspto.gov/web/offices/pac/dapp/sir/co/examhbk/five.htm)

40.6.1.1 Additional Types of Art Collections

a. Digest

A digest is a collection of cross-references created by an examiner; it is based on a concept that relates to a class but not to any particular subclass of that class. No ORs may be placed in digests. Digests are listed in numerical sequence at the end of the class schedule. Digests are not defined and are not available in the Public Search Room file.

b. Cross-Reference Art Collection

Cross-reference art collections differ from digests in that the material involved in the cross-reference art collection is defined to some degree and the patents are available in the Public Search Room. Some of these art collections include indentation levels. Placement in these areas is intended to follow official patent placement procedures. Cross-reference art collections are usually listed in numerical sequence at the end of the class. In most classes, subclass numbers 900 - 999 are reserved for cross-reference art collections. Some cross-reference art collections may only be searched electronically (via APS). Other cross-reference art collections are based on the European Classification (ECLA) system, which is an expansion of the International Patent Classification (IPC) system.

c. Alpha Subclasses

Over the years, Patent Examiners have created alpha subclasses (previously called “unofficial” subclasses) to facilitate searches within the arts under their jurisdiction. In this process, a grouping of patents is selected from an existing numeric subclass and then collected in a new indented subclass with an alpha designation following the numeric designation. Since the original subclass no longer has all the patents officially classified therein, it is given the alpha designation “R” (indicating residual). Note that the numeric subclass located in the Public Search Room equates to the residual subclass plus any alpha subclasses indented under it. There are no definitions for alpha subclasses, nor is it contemplated to define these subclasses beyond the context of the titles and the definitions of the subclasses from which they were formed (and which are now “R” subclasses). The indented alpha subclasses are positioned in their proper hierarchical location in the schedule (i.e., immediately above the next subclass having an indent level less than or equal to the “R” subclass). These art collections are offered only to the extent they may be helpful as a search assist and should not necessarily be considered to be a completed collection of the art represented by the title.

40.6.2 Design classes

Design classes are used to classify Design Patents. These classes have up to 2 digits and the subclasses have up to 3 digits.
40.6.3 STN format

In STN format the classification codes are always given with 3 digits for the class and 6 digits for the subclass. If needed they are filled with zeroes (see examples).

- **Display format:** NNN/NNN.NNN
- **Search format:** NNNNNNNN

For Design Classes 2 digits are used for the class and 6 digits for the subclass, if needed zeroes are added (see examples).

- **Display format:** NN/NNN.NNN
- **Search format:** NNNNNNNN

If the display format is used is used in a query it will automatically be changed to the correct search format by Messenger Field Edit (valid for SEARCH and EXPAND).

### Examples

<table>
<thead>
<tr>
<th>Printed document</th>
<th>STN Display</th>
<th>STN Search</th>
<th>Other formats</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/1</td>
<td>002/001.000</td>
<td>002001000/NCL</td>
<td>002/001.000/NCL</td>
<td></td>
</tr>
<tr>
<td>2/2.11</td>
<td>002/002.110</td>
<td>002002110/NCL</td>
<td>002/002.110/NCL</td>
<td></td>
</tr>
<tr>
<td>2/903</td>
<td>002/903.000</td>
<td>002903000/NCL</td>
<td>002/903.000/NCL</td>
<td>Cross-reference art collections</td>
</tr>
<tr>
<td>2/DIG5</td>
<td>002/DIG.005</td>
<td>002DIG005/NCL</td>
<td>002/DIG.005/NCL</td>
<td>Digest</td>
</tr>
<tr>
<td>188/1.11R</td>
<td>188/001.110R</td>
<td>188001110R/NCL</td>
<td>188/001.110R/NCL</td>
<td>Residual Subclass (cf. Alpha Subclass)</td>
</tr>
<tr>
<td>D1/102</td>
<td>D01/102.000</td>
<td>D01102000/NCL</td>
<td>D01/102.000/NCL</td>
<td>Design Class</td>
</tr>
</tbody>
</table>

The codes may be entered in a short format:

```plaintext
=> S 002/ NCL
L5 20421 002/ NCL
```

40.6.3.2 Sources

In USPATFULL, USPAT2, USPATOLD, CA, DWPI and INPADOCDB/INPAFAMDB the full US Patent Classification, including catchwords, is available as a thesaurus. IFIREF also has the full US Classification with all subclasses and Design Classes.

The USPTO has published the full classification on its web site, offering various display and search options:


Even a search in the concordance is possible:

- US-to-IPC Concordance
- US-to-Locarno Concordance (Design Classes)
- USPC-to-IPC Reverse Concordance [http://www.uspto.gov/go/classification/international/ipc/ipc8/ipc_concordance/ipcsel.htm](http://www.uspto.gov/go/classification/international/ipc/ipc8/ipc_concordance/ipcsel.htm)

40.6.3.3 Obtaining classification codes

Classification codes of the USPC can be found using US documents or by a text/IPC search, followed by SELECT or ANALYZE.

```plaintext
=> FIL USPATFULL
=> D HIS
```

Text search

```
FILE 'USPATFULL' ENTERED AT 13:18:48 ON 01 SEP 2009
L1 14750 S ?SKAT?
L2 5720 S (?ROLLERBLAD? OR ?ROLLER?(1A)?BLAD?)
L3 1067 S (?ROLLER?(1A)?SHOE?)
L4 20560 S L1-L3
L5 2870575 S (INLINE OR IN-LINE)
L6 132092 S ((SINGLE OR ONE)(1A)(ROW# OR TRACK#))
```
Types of search

L7  2495 S L5-L6 {3A} L4
L8  1419882 S (?BRAKE? OR ?BRAKING OR STOP###)
L9  536 S L7 (P) L8

=> D L9 1 TI IND

Display a document. Are these codes appropriate?

L9  ANSWER 1 OF 536 USPATFULL on STN
TI  IN-LINE ROLLER BLADE BRAKING SYSTEM
NCL INCLM: 280/087.041
NCL NCLM: 280/087.041
IC IPCI B62M0001-00 [I,A]

=> SET EXP CONT
SET COMMAND COMPLETED

The most frequent codes can be found by SELECT.

=> SEL 1- NCL
E1 THROUGH E543 ASSIGNED

=> D SEL E1-6
E1  141  280011231/NCL
E2  76   280011221/NCL
E3  65   280011270/NCL
E4  59   188005000/NCL
E5  45   280011216/NCL
E6  42   280011223/NCL

ANALYZE can also be used. In CA, ANALYZE should be preferred because of search term pricing.

=> ANALYZE L9 1- NCL
L10 ANALYZE L9 1- NCL : 543 TERMS

=> D
L10 ANALYZE L9 1- NCL : 543 TERMS

TERM #   # OCC  # DOC  % DOC NCL
------- ------ ------- ------ -------
1     141    141  26.31 280011231
2      76     75  13.99 280011221
3      65     64  11.94 280011270
4      59     59  11.01 188005000
5      45     45   8.40 280011216
6      42     42   7.84 280011223
7      40     39   7.28 280011212
8      36     35   6.53 280011204
9      35     35   6.53 280011280
10     35     33   6.16 280011211

Now use the thesaurus to identify the most appropriate codes.

=> E E1+ALL
E544  55345  BT4  280/NCL
      LAND VEHICLES
E545  44   BT3  280841000/NCL
      SKATES
E546  249  BT2  280011190/NCL
      Wheeled skate
E547  251  BT1  280011221/NCL
      ...In-line wheels {e.g., in-line skates}
E548  351  ...  280011231/NCL
      ...Three or four wheels
E549  30   NT1  280011232/NCL
      ...A wheel raised above skating surface

********** END **********

=> E E4+ALL
E550  22115  BT2  188/NCL
      BRAKES
E551  91   BT1  188002000R/NCL
      VEHICLE
40.7 Searching the national patent classification (Japanese FI and F-Terms)

The Japanese Patent Office develops two systems for the classification of Japanese patent documents:

The Japanese File Index (FI-term) was introduced 1980 as an internal system of the JPO. The index was based on the International Patent Classification, version 4, however at sub-group level it is much finer divided. In the course of the IPC reform FI-term were also revised in order to keep close to the IPC (however, some differences exist on sub-group level). In addition to the claims, FI-terms also reflect technological details from the description.

F-terms (File Forming Terms) were developed independently in order to reflect current technological developments. They were introduced 1987. F-terms are particularly useful for computer-aided searching and make it possible to reflect different aspects of a technology (use, application, material, etc.). F-terms are not available for all fields of technology, which are covered by FI-terms. F-term are used in connection with keywords, FI and IPC codes.

FI and F-term are revised once per year and updated in the databases.

In DWPI and INPADOC FI-terms and F-terms are available for publications starting from 1966; in CAplus F-terms are available for publications starting from 2004.

A description of the FI and F-terms can be found on the homepage of the Japanese Patent Office:

- http://www5.ipdl.inpit.go.jp/pmgs1/pmgs1/pmgs_E

40.7.1 Searching FI-Terms

A code has this format:

\[
\text{ANNAnnnN/NNnnnn nnn a}
\]

- A: letter
- N: digit
- n: digit, optional
- a: letter, optional

<table>
<thead>
<tr>
<th>Section</th>
<th>Class</th>
<th>Subclass</th>
<th>Group</th>
<th>Subgoup</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-H</td>
<td>01-99</td>
<td>A-Z</td>
<td>1-999</td>
<td>00-999999</td>
<td>00-999 A-Z</td>
</tr>
</tbody>
</table>

The search is done in the same way as with the IPC. In addition to the full classification the following search indices are available:

ANNAnnnN-Nn

ANNAnnn

ANNA

=> $ A63C0019-06 A/JPC
L6 19 A63C0019-06 A/JPC

Search can be done parallel to the IPC:

=> $ A63C0019-06/JPC, IPC
52 A63C0019-06/JPC
Types of search

If the EPC is used in the same search, truncation must be used:

=> S A63C0019 - 06?/JPC, IPC, EPC
52 A63C0019 - 06?/JPC
571 A63C0019 - 06?/IPC
353 A63C0019 - 06?/EPC
L 4 592 A63C0019 - 06?/JPC, IPC, EPC

40.7.2 Searching F-Terms (File Forming Terms)

A term has this format:

NANNN / AA NN

A: letter
N: digit

File Forming Term

<table>
<thead>
<tr>
<th>Theme Code</th>
<th>Term Code</th>
<th>Perspective</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>NANNN /  AA NN</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example:

4C601 /  BB  03

F-terms can be found:

- By an ANALYZE command after a keyword or a classification search to find F-terms with many occurrences and followed by a search in the F-Term thesaurus,
- By the F/F-Term search available on the server of the Japanese Patent Office:

<table>
<thead>
<tr>
<th>Viewpoint</th>
<th>P-term</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB</td>
<td>4C601 Ultra sonic diagnosis equipment A61B8/00-8/14</td>
</tr>
<tr>
<td>DD</td>
<td>MEASURING OBJECTS</td>
</tr>
</tbody>
</table>

- http://www5.ipdl.inpit.go.jp/pmsg1/pmsg1/pmsg_E

F-terms can then be used to refine a search for Japanese patent documents:

4C601: Ultra sonic diagnosis (theme)
BB03: Image pick-up spaces being three-dimensional (Term Code)
DD11: Head (Term Code)
DD13: Eyes (Term Code)
DD15: Heart (Term Code)
Guide to STN Patent Databases

=> S (4C601/BB03 AND (4C601/DD11 OR 4C601/DD13 OR 4C601/DD15))/FTERM
   1105 4C601/BB03/FTERM
   33 4C601/DD11/FTERM
   20 4C601/DD13/FTERM
   484 4C601/DD15/FTERM
L9 165 (4C601/BB03 AND (4C601/DD11 OR 4C601/DD13 OR 4C601/DD15))/FTERM

40.8 Searching the Derwent Classifikation (/DC) and Manual Codes

The Derwent Classification can be used as an alternative to the International Patent Classification for searching in the database DWPI. Similar to the IPC, it is a hierarchical system: (A = letter, N = number)

<table>
<thead>
<tr>
<th>T</th>
<th>Section</th>
<th>Data Recording</th>
</tr>
</thead>
<tbody>
<tr>
<td>T03</td>
<td>Class</td>
<td>Record carriers and accessories in general</td>
</tr>
<tr>
<td>T03-H</td>
<td>Group (Generic Manual Code)</td>
<td>Containers</td>
</tr>
<tr>
<td>T03-H01</td>
<td>Sub-group</td>
<td>Record carriers and accessories in general</td>
</tr>
<tr>
<td>T03-H01A</td>
<td>Sub-group division</td>
<td>For discs</td>
</tr>
<tr>
<td>T03-H01A6</td>
<td>Full Manual Code</td>
<td>Disc type</td>
</tr>
<tr>
<td>T03-H01A6B</td>
<td>Full Manual Code</td>
<td>Optical</td>
</tr>
</tbody>
</table>

The codes are assigned intellectually and represent the characteristic features of the invention. (Only in the P section, General and Mechanical, the code is automatically assigned from the IPC. Since 2006, the codes are assigned intellectually in the Q section, Mechanical / Transportation, too.) The codes being assigned by the database producer a better uniformity of assigning the codes may be assumed than with the IPC. The codes are assigned to the Basic. Usually a number of codes are used in order to appropriately reflect the features of the invention.

The Derwent Classification is revised from time to time, this must be considered when using it. Derwent provide Code lists as search aids:


There is also an on-line thesaurus that may be used to identify the codes or to search using the DC codes.

The Derwent Classification codes are entered in the DC (Derwent Class) field in all file segments (CPI, EPI, and GMPI) of the database. Additionally the codes are entered in the MC (Manual Codes) field of the EPI (Electrical indexing) and CPI (Chemical indexing) file segments. The DC field holds the code to the subclass level (3 characters) only while the MC field contains the Full Manual Code.

DC  A88  P51  Q64  Q67  
MC  CPI: A11-A05B; A11-C01A; A12-H02C

Using the Manual Codes in the EPI and CPI (subscribers only) segments it is often possible to classify a subject much more exactly than with the International Patent Classification.

Both fields are part of the IND and MAX formats. To SEARCH use the /MC field in the EPI segment in WPINDEX. The Chemical Indexing in the CPI file segment can only be used in the WPIDS and WPIX subscriber files.

In the /DC field either the section letter alone or the three-character class can be searched, if applicable use # or ! to truncate.

These options are available when searching in /MC:

- SEARCH a known code (e.g. X13-B02A/MC).
- SEARCH a code and all its sub-codes using truncation (e.g. X13-B?/MC).
- SEARCH at class level, this covering all sub-codes without truncation (e.g. X13/MC).
- Using the on-line thesaurus.

As with IPC searching it is advisable not to use the codes on their own, but to combine them with other search terms.
40.9 Searching for US Design Patents by Locarno Classification in INPADOCDB/INPAFAMDB

In the INPADOC databases the codes of the Locarno Classification are available for US Design Patents from April 2005.

The Locarno Classification is published by WIPO and has 32 classes and 219 subclasses. It is revised every five years. The 9th revision has been in force since January 2009:

- http://www.wipo.int/classifications/nivilo/locarno/

1216/LCL could also be used for searching.

=> S 12-16/LCL
L1 4334 12-16/LCL
   (1216/LCL)

=> D ALL
L1 ANSWER 1 OF 4334 INPADOCDB COPYRIGHT 2011 EPO/FIZ KA on STN
AN 63809272 INPADOCDB ED 20110210 EW 201106 UP 20110210 UW 201106
FN 41436825
TI Truck box bed rail guard.
IN TAYLOR ELWOOD L.
INS TAYLOR ELWOOD L, CA
PAS TAYLOR ELWOOD L
DT Design Patent
PI US 631819D S1 20110201 English
PIT US1 DESIGN PATENT
DAV 20110201 printed with grant
STA GRANTED
AI US 2010-368102F F 20100818
AIT USF Design application
PRAI US 2010-368102F F 20100818 (USF, 20110210, Y)
PRAIT USF Design application
NCL NCLM D12/414.000
LCL 12-16
FA AI; AN; DAV; DT; ED; EW; IN; INS; LA; LCL; NCL; PAS; PI; PIT; PRAI; TI
41 Search by subject index

41.1 Search fields

<table>
<thead>
<tr>
<th>Databases</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Abstracts</td>
<td>BI</td>
<td>RN</td>
<td>CAS Registry Number</td>
</tr>
<tr>
<td></td>
<td>BI, CT, CW, IT</td>
<td>CT, IT</td>
<td>Controlled Terms, Index Terms</td>
</tr>
<tr>
<td></td>
<td>BI</td>
<td>ST</td>
<td>Supplementary Terms</td>
</tr>
<tr>
<td></td>
<td>RL</td>
<td>RL</td>
<td>Role Indicator</td>
</tr>
<tr>
<td>ENCOMPPAT</td>
<td>BI, RN</td>
<td>RN</td>
<td>CAS Registry Number</td>
</tr>
<tr>
<td></td>
<td>BI, CT, CW</td>
<td>CT</td>
<td>Controlled Terms</td>
</tr>
<tr>
<td></td>
<td>CTA</td>
<td>CTA</td>
<td>Controlled Terms, Assigned</td>
</tr>
<tr>
<td></td>
<td>ST</td>
<td>ST</td>
<td>Supplementary Terms</td>
</tr>
<tr>
<td></td>
<td>LT</td>
<td>LT</td>
<td>Linked Terms</td>
</tr>
<tr>
<td>FRANCEPAT</td>
<td>CT, CW, CTFR</td>
<td>CT, CTFR</td>
<td>Controlled Terms</td>
</tr>
<tr>
<td>IFLALL</td>
<td>BI</td>
<td>RN</td>
<td>CAS Registry Number</td>
</tr>
<tr>
<td></td>
<td>CT, UN</td>
<td>CT</td>
<td>Controlled Terms</td>
</tr>
<tr>
<td></td>
<td>UN</td>
<td>UN</td>
<td>Uniterms</td>
</tr>
<tr>
<td></td>
<td>URN</td>
<td>URN</td>
<td>Uniterm Registry Number</td>
</tr>
<tr>
<td></td>
<td>FG</td>
<td>FG</td>
<td>Fragment Code</td>
</tr>
<tr>
<td>IMSPATENTS</td>
<td>BI</td>
<td>RN</td>
<td>CAS Registry Number</td>
</tr>
<tr>
<td></td>
<td>BI, CN, CNS</td>
<td>CN</td>
<td>Chemical Names</td>
</tr>
<tr>
<td></td>
<td>BI, TN</td>
<td>TN</td>
<td>Trade Names</td>
</tr>
<tr>
<td></td>
<td>BI, APP</td>
<td>APP</td>
<td>Clinical Application</td>
</tr>
<tr>
<td></td>
<td>BI, CC</td>
<td>CC</td>
<td>Classification (Therapeutic Class)</td>
</tr>
<tr>
<td></td>
<td>BI, ST</td>
<td>ST</td>
<td>Supplementary Terms (e.g. product or process patent)</td>
</tr>
<tr>
<td>PATDD</td>
<td>ST, SW</td>
<td>ST</td>
<td>Supplementary Terms</td>
</tr>
<tr>
<td>PATDPASPC</td>
<td>RN</td>
<td>RN</td>
<td>CAS Registry Number, CAS Registry Number Certified Compounds, CAS Registry Number Other Compounds, CAS Registry Number Presumably Certified Compounds</td>
</tr>
<tr>
<td></td>
<td>RN.CEC</td>
<td>CN</td>
<td>Chemical Names, Chemical Names Certified Compounds, Chemical Names Other Compounds, Chemical Names Presumably Certified Compounds, Chemical Name Segment</td>
</tr>
<tr>
<td></td>
<td>RN.OC, PCC</td>
<td>CN</td>
<td>fragment code</td>
</tr>
<tr>
<td></td>
<td>CN.CEC</td>
<td>CN</td>
<td>Indexterms</td>
</tr>
<tr>
<td></td>
<td>CN.OC</td>
<td>CN</td>
<td>Indexterms</td>
</tr>
<tr>
<td></td>
<td>CN.PCC</td>
<td>CN</td>
<td>Indexterms</td>
</tr>
<tr>
<td></td>
<td>CNS</td>
<td>CNS</td>
<td>Indexterms</td>
</tr>
<tr>
<td></td>
<td>IT</td>
<td>IT</td>
<td>Indexterms</td>
</tr>
<tr>
<td>USPATFULL / USPAT2</td>
<td>CT, CW, IT</td>
<td>CT, IT</td>
<td>Controlled Terms, Index Terms</td>
</tr>
<tr>
<td>USPATOLD</td>
<td>CT, CW, IT</td>
<td>CT, IT</td>
<td>Controlled Terms, Index Terms</td>
</tr>
<tr>
<td>DWPI*</td>
<td>KW</td>
<td>KW</td>
<td>Keyword Indexing</td>
</tr>
<tr>
<td></td>
<td>MC</td>
<td>MC</td>
<td>Manual Codes für EPI-Segment</td>
</tr>
</tbody>
</table>

More fields are available in DWPI (WPINDEX) and in the subscriber files, WPIIDS and WPIX.

Indexing of patent documents is mainly done in chemistry concerning the information contained on compounds (formulae, reactions, etc.). As this is a very wide and complex field, additional literature is referred to as follows:

- CAS Coverage of Patents


- DWPI Reference Manual – Derwent World Patents Index produced by Thomson Reuters (Scientific) : STN online user guide, 2009
Types of search

- DCR Reference Manual – A supplement for the Derwent World Patents Index STN online user guide: DWPI
- User Documentation – Complete List
  http://www.stn-international.com/materials_for_searching_stn_cl.html

41.2 CAS Registry Number

In the Chemical Abstracts, IMSPATENTS, ENCOMPPAT, the IFIClaims and USPATFULL / USPAT2 files CAS Registry numbers are available for searching. These numbers can be identified by a search in the REGISTRY file. Here it is possible to search by the chemical or trivial names of chemical substances or conduct a structure search. Apart from the Registry number the result contains in the Locator field a list of databases where the CAS Registry number appears.

Re-searching a search result (L number) with a Registry number will automatically search for the Registry number rather than repeat the original search, e.g. a structure search. (The Registry number(s) will be selected automatically and the result be searched.) In the respective databases the Registry numbers can be searched in the Basic Index (BI).

When searching for a Registry number the search should be started in the REGISTRY database and then be continued with the resulting L number in the other databases. This way Deleted Registry Numbers (DRN) will be included in the search. If a Registry number is entered directly in a search in the CA or CAPLUS files then an automatic crossover to the REGISTRY file is performed to guarantee a comprehensive search.

41.3 Indexing in Chemical Abstracts

In the Chemical Abstracts database, the results of subject indexing are contained above all in the IT field (Index terms, searchable as /IT or /CT and in the Basic Index /BI), (since 1967). The IT field corresponds to two indexes of the printed Chemical Abstracts:

- the General Subject Index: general contents of the referenced documents, classes of compounds, utilization and application of chemical substances
- the Chemical Substance Index: information on chemical substances referred to in the referenced publications

```
IT   Polyimides, preparation
RL: PREP (Preparation)
   (arom., prepn. of pyromellitic anhydride-based, for thin films, for liq. crystals, with good orientation)
```

The field heading can be searched in /CT and the narrative text (in parenthesis) in /IT. Both can be linked by (L) proximity.

The IT field also contains the CAS Registry numbers:

```
IT   52219-35-9   107396-90-7   112172-80-2   125692-20-8   143133-03-3
     143243-17-8   143251-81-4   143374-45-2
RL: USES (Uses)
   (Langmuir-Blodgett films from, imidation of, for liq. crystals)
```

An on-line thesaurus is available in the CT field (see HELP LEXICON).

Since mid-1994 CAS Roles are entered into the Chemical Abstracts database (subfield.RL) for newly indexed substances and index terms. These provide additional information on the substances treated in the indexed publications. For CAS Roles an online thesaurus is available. For searching there are two alternative ways of entering the Role: (a) Using the /RL SEARCH field; (b) Using the Role code as a SEARCH field:

```
=> $ METHANOL (L) MOA/ RL
=> $ METHANOL/ MOA
```

On Roles or the thesaurus see the online help with the commands HELP ROLES, HELP THESAURUS and HELP LEXICON.
The chemical index terms and CAS Registry numbers are copied to the USPATFULL / USPAT2 database, even if it was a different patent family member that was indexed in CA. In USPATFULL these index fields are, however, not searchable in the Basic Index but have to be searched in the /IT and /CT fields.

### 41.4 IFIALL

In IFIALL, searching for patents published before January 25, 2011, is possible by:

- In-depth indexing by Uniterm Codes and Controlled Term keywords
- CAS Registry Numbers (RN) and references to CAPLUS
- Fragment codes which allow for substructure searching of chemical substances
- Role indicators for chemical substances

The Uniterms, as well as the U.S. National Classification, are available in the IFIREF database. Furthermore, when displaying in the IIND format, a detailed description of the Uniterms will be given.

### 41.5 Sequence searching

#### 41.5.1 Search Fields

<table>
<thead>
<tr>
<th>Databases</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>DGENE</td>
<td>AA, AA.CNT</td>
<td>AA</td>
<td>Amino Acid</td>
</tr>
<tr>
<td></td>
<td>NA, NA.CNT</td>
<td>NA</td>
<td>Nucleic Acid</td>
</tr>
<tr>
<td></td>
<td>FEAT</td>
<td>FEAT</td>
<td>Feature Table: Features and Modifications of the Sequence</td>
</tr>
<tr>
<td></td>
<td>MTY</td>
<td>MTY</td>
<td>Molecule Type (DNA, etc.)</td>
</tr>
<tr>
<td></td>
<td>KW</td>
<td>KW</td>
<td>Keywords</td>
</tr>
<tr>
<td></td>
<td>DESC</td>
<td>DESC</td>
<td>Description (Identification Number of the Sequence incl., if available)</td>
</tr>
<tr>
<td></td>
<td>ORGN</td>
<td>ORGN</td>
<td>Organism Name</td>
</tr>
<tr>
<td></td>
<td>SQL</td>
<td>SQL</td>
<td>Sequence Length</td>
</tr>
<tr>
<td></td>
<td>SQEP</td>
<td>SEQ</td>
<td>Sequence Exact, Protein</td>
</tr>
<tr>
<td></td>
<td>SQEFP</td>
<td>SEQ3</td>
<td>Subsequence, Protein</td>
</tr>
<tr>
<td></td>
<td>SQSP</td>
<td>SQSFMP</td>
<td>Sequence Exact, Nucleic Acid</td>
</tr>
<tr>
<td></td>
<td>SQSN</td>
<td>PSL</td>
<td>Subsequence, Nucleic Acid</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Patent Sequence Localization in the Original Patent Application</td>
</tr>
<tr>
<td>PCTGEN</td>
<td>FEAT</td>
<td>FEAT</td>
<td>Feature Table: Features and Modifications of the Sequence</td>
</tr>
<tr>
<td></td>
<td>MTY</td>
<td>MTY</td>
<td>Molecule Type (DNA, etc.)</td>
</tr>
<tr>
<td></td>
<td>ORGN</td>
<td>ORGN</td>
<td>Identification Number of the Sequence</td>
</tr>
<tr>
<td></td>
<td>SEQN</td>
<td>SEQ</td>
<td>Sequence Length</td>
</tr>
<tr>
<td></td>
<td>SQL</td>
<td>SEQ, SEQ3, SEQO</td>
<td>Sequence Exact, Protein</td>
</tr>
<tr>
<td></td>
<td>SQEP</td>
<td>SEQ</td>
<td>Subsequence, Protein</td>
</tr>
<tr>
<td></td>
<td>SQEFP</td>
<td>SEQ3</td>
<td>Sequence Exact, Nucleic Acid</td>
</tr>
<tr>
<td></td>
<td>SQSP</td>
<td>SQSFMP</td>
<td>Subsequence, Nucleic Acid</td>
</tr>
<tr>
<td></td>
<td>SQSN</td>
<td>PSL</td>
<td>Sequence in original application format</td>
</tr>
<tr>
<td>USGENE</td>
<td>FEAT</td>
<td>FEAT</td>
<td>Feature Table: Features and Modifications of the Sequence</td>
</tr>
<tr>
<td></td>
<td>MTY</td>
<td>MTY</td>
<td>Molecule type (DNA, etc.)</td>
</tr>
<tr>
<td></td>
<td>DESC</td>
<td>DESC</td>
<td>Description (including Identification number)</td>
</tr>
<tr>
<td></td>
<td>ORGN</td>
<td>ORGN</td>
<td>Organism name</td>
</tr>
<tr>
<td></td>
<td>SEQN</td>
<td>SEQ</td>
<td>Identification Number of the Sequence</td>
</tr>
<tr>
<td></td>
<td>SQL</td>
<td>SEQ, SEQ3, SEQO</td>
<td>Sequence Length</td>
</tr>
<tr>
<td></td>
<td>SQEP</td>
<td>SEQ</td>
<td>Sequence Exact, Protein</td>
</tr>
<tr>
<td></td>
<td>SQEFP</td>
<td>SEQ3</td>
<td>Subsequence, Protein</td>
</tr>
<tr>
<td></td>
<td>SQSP</td>
<td>SQSFMP</td>
<td>Sequence Exact, Nucleic Acid</td>
</tr>
<tr>
<td></td>
<td>SQSN</td>
<td>PSL</td>
<td>Subsequence, Nucleic Acid</td>
</tr>
<tr>
<td></td>
<td>SSO</td>
<td>SSO</td>
<td>Sequence origin: Sequence type, source, publication type</td>
</tr>
</tbody>
</table>
Sequence data can be searched in the DGENE (Derwent), REGISTRY (CAS), PCTGEN (WIPO, FIZ Karlsruhe) and USGENE (SequenceBase Corporation, FIZ Karlsruhe) databases. The databases hold one record for every amino or nucleic acid sequence indexed from a patent publication. DGENE also includes the bibliographical details with the title and abstract in addition to the sequence data. PCTGEN and USGENE includes the bibliographical details with the title, in USGENE all claims (but only the main claim is searchable). In REGISTRY, bibliographical data and abstracts cannot be searched. Additional information on the patent or patent family can be found in the corresponding bibliographical databases (DWPI, CAPLUS, PCTFULL, USPATALL).

The individual amino acid residues or nucleic acid bases can be searched in the AA (/AA, /AA.CNT) (DGENE) or NA (/NA, /NA.CNT) (DGENE and REGISTRY) fields respectively.

Sequences cannot be searched directly using the SEARCH command. A special RUN package has to be employed (DGENE, PCTGEN and USGENE):

- GETSEQ for simple sequence searches
- GETSIM for similarity (homology) searches (based on FastA algorithm)
- BLAST® for similarity (homology) searches (based on BLAST algorithm)
- GETSIM with proportional refinement of the results of homology searches
- BLAST® with proportional refinement of the results of homology searches

A short sequence may be entered directly. For longer sequences UPLOAD or the STN Upload Query Wizard should be used (DGENE, PCTGEN and USGENE on STN on the WEB and STN Express).

When using GETSEQ to search for sub-sequences in the /SQSP, SQSFP, or /SQSN fields a variety of expressions may be used to introduce repetitions, omissions, alternatives, etc., and thus make the search sequence very variable (see the database sheet or the display of HELP SQQ for more information).

For amino acids one or three letter codes can be used for SEARCH and DISPLAY, for nucleic acids only one letter codes can be used. A list of the possible codes can be obtained with either HELP AAC for amino acids or HELP NUC for nucleic acids.

With all sequence searches (BLAST, GETSIM, GETSEQ) the correspondences between the sequence searched and the sequence found can be displayed with the command DISPLAY ALIGN (DGENE, PCTGEN and USGENE).
Here is a summary of the options available in each database:

<table>
<thead>
<tr>
<th></th>
<th><strong>DGENE</strong></th>
<th><strong>REGISTRY</strong></th>
<th><strong>PCTGEN</strong></th>
<th><strong>USGENE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Period covered</strong></td>
<td>since 1981</td>
<td>since 1957</td>
<td>since 2001</td>
<td>since 1982</td>
</tr>
<tr>
<td><strong>Sources</strong></td>
<td>41 patent organisations</td>
<td>9,000 journals, 57 patent organisations</td>
<td>WIPO</td>
<td>USPTO</td>
</tr>
<tr>
<td><strong>Sequence type</strong></td>
<td>Peptide sequences, Nucleotide sequences</td>
<td>Peptide sequences, Nucleotide sequences</td>
<td>Peptide sequences, Nucleotide sequences</td>
<td>Peptide sequences, Nucleotide sequences</td>
</tr>
<tr>
<td><strong>Update</strong></td>
<td>Biweekly</td>
<td>Daily</td>
<td>Weekly</td>
<td>Weekly</td>
</tr>
<tr>
<td><strong>Sequence display</strong></td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td><strong>Name search</strong></td>
<td>DESC, KW, ORGN</td>
<td>CN, ORGN</td>
<td>ORGN</td>
<td>ORGN, DESC</td>
</tr>
<tr>
<td><strong>Bibliographical details (searchable)</strong></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td><strong>Abstracts and title</strong></td>
<td>yes</td>
<td>no</td>
<td>title only</td>
<td>yes + ECLM</td>
</tr>
<tr>
<td><strong>SCM searching (Sequence Code Match)</strong></td>
<td>GETSEQ</td>
<td>yes</td>
<td>GETSEQ</td>
<td>GETSEQ</td>
</tr>
<tr>
<td><strong>Similarity Searching</strong></td>
<td>BLAST, GETSIM (FastA)</td>
<td>BLAST</td>
<td>BLAST, GETSIM (FastA)</td>
<td>BLAST, GETSIM (FastA)</td>
</tr>
<tr>
<td><strong>Similarity ALIGN display</strong></td>
<td>In the transcript</td>
<td>STN EXPRESS: in the Merged Transcript Report after post-processing</td>
<td>In the transcript</td>
<td>In the transcript</td>
</tr>
</tbody>
</table>

More information and documentation can be found on this URL:

42 Search by numeric properties

42.1 Numeric properties in patents

Numeric indications of physical or chemical properties play an important role in patents, for example:

- Amount or weight
- Concentration
- Ratio of mixture
- Frequency
- Wave length
- Temperature

Typically applicants avoid stating exact values in order to extend the scope of protection and to keep business secrets. In patent applications they rather state wide ranges around the actually relevant or commercially interesting values – a practice that makes searching numeric properties in ordinary text documents even more difficult.

42.2 Problem

Intervals of numeric properties are difficult to find using conventional tools for fulltext searching:

- Manually entering all possible values is cumbersome and error-prone, in particular if a larger interval is wanted
- A search by a sequence of numbers often exceeds the system limits
- The search is substantially incomplete

Consequently, numeric indications:

- Must be semantically treated
- Must be linked to their respective units
- Units must be convertible

42.3 Numeric Property Search (NPS)

Numeric Property Search (NPS) makes it possible to search numeric indications in patent publications in the context of the respective fulltext. Due to the numeric properties being indexed in the context of the document proximity operators known from text searches can be employed to link numeric values and keywords. This search option has already been implemented in the full-text databases AUPATFULL, CANPATFULL, CNFULL, DEFULL, INFULL, JPFULL, and PCTFULL and in the non-patent literature databases 1Mobility, 2Mobility, AEROSPACE, AGRICOLA, ENCOMPPAT/ENCOMPPAT2, FSTA, METADEX, PQSCITECH (version 1). Upon introduction of NPS into Derwent World Patent Index the search options have been extended both with regard to the number of properties covered and possible synonyms (version 2). This version is also available in the FSTA (Food Science and Technology) database.

Numeric properties are extracted from the fulltext and processed by STN for improved searching:

- More than 55 (version 1: 35) chemical and physical properties in approximately 1,800 (version 1: 400) units
- Units are converted automatically
- Numerics are recognized (version 2)
- All English text fields are included (TIEN, ABEN, CLMEN, DETDEN)
- Numeric indications are kept in the context of the fulltext (Proximity)
• Full flexibility for searching: open or closed intervals, tolerances, exact values, magnitudes (nano-, milli-, kilo-)

42.3.1 Semantic enrichment

For semantic enrichment this basic algorithm is performed:

• Correct identification of numbers and units:

  ... The resulting CeO2 particle size measured by x-ray diffraction were in the range of 10 to 30 nm. Fig. 1 shows typical nano particles in a sample milled for 6 hours. In a second experiment a 1 litre attrition mill was used for milling the mixture. ... In addition it is widely accepted that the existence of a so-called 'limiting particle size' limits the practical minimum particle size that can be attained by grinding to values greater than 100 nm, irrespective of the type of ball mill employed. ...

There are both exact numeric values and closed and open intervals. The units are sometimes written out, sometimes abbreviated, and they are appended to the respective number with or without a space. The empirical formula and the reference to “Fig. 1” also contain numbers, but they are no numeric properties.

• Extraction of values and their respective units:
  - 10 nm
  - 30 nm
  - 6 hours
  - 1 liter
  - 100 nm

• Conversion to basic SI units:
  - 10 nm = 1,0 x 10⁻⁸ m
  - 30 nm = 3,0 x 10⁻⁸ m
  - 6 hours = 2,16 x 10⁴ s
  - 1 litre = 1,0 x 10⁻³ m³
  - 100 nm = 1,0 x 10⁻⁷ m

The data found can be searched in the context of the original document:

• As exact values or in intervals
• In combination with keywords
• Using proximity operators
• In various units

The algorithm is able to identify and process SI units¹, metric and non-metric units and various writings. For example feet and other units of the imperial system are identified and converted to their metric equivalents.

---

¹ Strictly speaking, only metre, kilogram, second, kelvin, mole and candela are SI basic units. Others, such as cubic metre, mole per litre, joule or Newton are derived units; they are derived from the basic units. Others again, such as bit and byte or percent are not part of the Système International at all.
### 42.3.2 Searchable physical quantities

The table below lists the searchable physical quantities together with the respective units and search fields:

<table>
<thead>
<tr>
<th>Search Field</th>
<th>Quantity</th>
<th>Unit</th>
<th>Symbol</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>/AOS</td>
<td>Amount of Substance</td>
<td>Mole</td>
<td>mol</td>
<td></td>
</tr>
<tr>
<td>/BIR</td>
<td>Bit Rate</td>
<td>Bit / Second</td>
<td>bit/s</td>
<td></td>
</tr>
<tr>
<td>/BIT</td>
<td>Stored Information</td>
<td>bit</td>
<td>bit</td>
<td></td>
</tr>
<tr>
<td>/CAP</td>
<td>Capacitance</td>
<td>Farad</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>/CDN</td>
<td>Current density</td>
<td>Ampere / Square meter</td>
<td>A/m²</td>
<td>Version 2</td>
</tr>
<tr>
<td>/CMOL</td>
<td>Molar Concentration (Molarity)</td>
<td>mole / litre</td>
<td>mol/l</td>
<td></td>
</tr>
<tr>
<td>/CON</td>
<td>Conductance (Electrical Conductance)</td>
<td>Siemens</td>
<td>S</td>
<td></td>
</tr>
<tr>
<td>/DB</td>
<td>Dezibel</td>
<td>Dezibel</td>
<td>dB</td>
<td>Version 2</td>
</tr>
<tr>
<td>/DEG</td>
<td>Degree</td>
<td>Degree</td>
<td>degree</td>
<td></td>
</tr>
<tr>
<td>/DEN</td>
<td>Density, Mass Concentration</td>
<td>Kilogram / Cubic Metre</td>
<td>kg/m³</td>
<td></td>
</tr>
<tr>
<td>/DEQ</td>
<td>Dose Equivalent</td>
<td>Sievert</td>
<td>Sv</td>
<td>Version 2</td>
</tr>
<tr>
<td>/DOS</td>
<td>Dosage</td>
<td>Milligram / Kilogram</td>
<td>mg/kg</td>
<td>Version 2</td>
</tr>
<tr>
<td>/DV</td>
<td>Viscosity, Dynamic</td>
<td>Pascal x Second</td>
<td>Pa s</td>
<td></td>
</tr>
<tr>
<td>/ECH</td>
<td>Electric Charge</td>
<td>Coulomb</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>/ECO</td>
<td>Electric Charge Density</td>
<td>Coulomb / Square meter</td>
<td>C/m²</td>
<td></td>
</tr>
<tr>
<td>/ECO</td>
<td>Electrical Conductivity</td>
<td>Siemens / Meter</td>
<td>S/m</td>
<td>Version 2</td>
</tr>
<tr>
<td>/ELC</td>
<td>Electric Current</td>
<td>Ampere</td>
<td>A</td>
<td>Version 2</td>
</tr>
<tr>
<td>/ELF</td>
<td>Electric Field</td>
<td>Volt / Meter</td>
<td>V/m</td>
<td>Version 2</td>
</tr>
<tr>
<td>/ENE</td>
<td>Energy</td>
<td>Joule</td>
<td>J</td>
<td></td>
</tr>
<tr>
<td>/ERE</td>
<td>Electrical Resistivity</td>
<td>Ohm x Meter</td>
<td>ohm m</td>
<td>Version 2</td>
</tr>
<tr>
<td>/FOR</td>
<td>Force</td>
<td>Newton</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>/FRE</td>
<td>Frequency</td>
<td>Hertz</td>
<td>Hz</td>
<td></td>
</tr>
<tr>
<td>/I1U</td>
<td>International Unit</td>
<td>none</td>
<td>IU</td>
<td>Version 2</td>
</tr>
<tr>
<td>/KV</td>
<td>Viscosity, Kinematic</td>
<td>Square Metre / Second</td>
<td>m²/s</td>
<td>Version 2</td>
</tr>
<tr>
<td>/LEN (/SIZ)</td>
<td>Length</td>
<td>Meter</td>
<td>m</td>
<td></td>
</tr>
<tr>
<td>/LUME</td>
<td>Luminous Emissance/Illuminance</td>
<td>Lux</td>
<td>lx</td>
<td></td>
</tr>
<tr>
<td>/LUIMF</td>
<td>Luminous Flux (Luminous Power)</td>
<td>Lumen</td>
<td>lm</td>
<td></td>
</tr>
<tr>
<td>/LUMI</td>
<td>Luminous intensity</td>
<td>Candela</td>
<td>cd</td>
<td></td>
</tr>
<tr>
<td>/M</td>
<td>Mass</td>
<td>Kilogram</td>
<td>kg</td>
<td></td>
</tr>
<tr>
<td>/MHC</td>
<td>Mass to Charge Ratio</td>
<td>none</td>
<td>m/z</td>
<td></td>
</tr>
<tr>
<td>/MFD (/MFS)</td>
<td>Magnetic Flux Density</td>
<td>Tesla</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>/MFR (/MFL)</td>
<td>Mass Flow Rate</td>
<td>Kilogram / Second</td>
<td>kg/s</td>
<td></td>
</tr>
<tr>
<td>/MW (/MM)</td>
<td>Molecular Weight, (Molar Mass)</td>
<td>Gram / Mole</td>
<td>g/mol</td>
<td></td>
</tr>
<tr>
<td>/MOLS</td>
<td>Molarity of Substance</td>
<td>Mol / Kilogram</td>
<td>mol/kg</td>
<td>Version 2</td>
</tr>
<tr>
<td>/MVR</td>
<td>Melt Volumen Rate</td>
<td>none</td>
<td>g/10 min</td>
<td>Version 2</td>
</tr>
<tr>
<td>/NUC</td>
<td>Nutrition Content</td>
<td>none</td>
<td>g/100 kcal</td>
<td>Version 2</td>
</tr>
<tr>
<td>/PER</td>
<td>Percent (Proportionality)</td>
<td>none</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>/PERA</td>
<td>Permittivity, Absolute</td>
<td>Farad / Meter</td>
<td>F/m</td>
<td>Version 2</td>
</tr>
<tr>
<td>/PHV</td>
<td>pH Value</td>
<td>pH</td>
<td>ph</td>
<td></td>
</tr>
<tr>
<td>/POW</td>
<td>Power</td>
<td>Watt</td>
<td>W</td>
<td></td>
</tr>
<tr>
<td>/PRESS /P</td>
<td>Pressure</td>
<td>Pascal</td>
<td>Pa</td>
<td></td>
</tr>
<tr>
<td>/RAD</td>
<td>Radioactivity</td>
<td>Becquerel</td>
<td>bq</td>
<td></td>
</tr>
<tr>
<td>/RES</td>
<td>Electrical Resistance</td>
<td>Ohm</td>
<td>Ohm</td>
<td></td>
</tr>
<tr>
<td>/RSP</td>
<td>Rotational Speed</td>
<td>Revolution / Minute</td>
<td>rpm</td>
<td></td>
</tr>
<tr>
<td>/SAR</td>
<td>Area</td>
<td>Square Meter</td>
<td>m²</td>
<td></td>
</tr>
<tr>
<td>/SOL</td>
<td>Solubility</td>
<td>Gram / 100 Gram</td>
<td>g/100g</td>
<td>Version 2</td>
</tr>
<tr>
<td>/STSC</td>
<td>Surface Tension, Spring Constant</td>
<td>Joule / Square Metre</td>
<td>J/m²</td>
<td></td>
</tr>
<tr>
<td>/TCO</td>
<td>Thermal Conductivity</td>
<td>Watt / Meter Kelvin</td>
<td>W/m K</td>
<td>Version 2</td>
</tr>
<tr>
<td>/TEMP</td>
<td>Temperature</td>
<td>Kelvin</td>
<td>K</td>
<td></td>
</tr>
<tr>
<td>/TIM</td>
<td>Time</td>
<td>Second</td>
<td>s</td>
<td></td>
</tr>
<tr>
<td>/VEL</td>
<td>Velocity</td>
<td>Metre / Second</td>
<td>m/s</td>
<td></td>
</tr>
<tr>
<td>/VELA</td>
<td>Velocity, angular</td>
<td>Radian / Second</td>
<td>rad/s</td>
<td>Version 2</td>
</tr>
<tr>
<td>/VLR</td>
<td>Volumetric Flow Rate</td>
<td>Cubic Meter / Second</td>
<td>m³/s</td>
<td>Version 2</td>
</tr>
<tr>
<td>/VOL</td>
<td>Volume</td>
<td>Cubic Metre</td>
<td>m³</td>
<td></td>
</tr>
<tr>
<td>/VOLT</td>
<td>Voltage</td>
<td>Volt</td>
<td>V</td>
<td></td>
</tr>
</tbody>
</table>

Detailed information on the searchable quantities can be displayed by entering `EXPAND/PHP` or `HELP NPS`.
42.3.3 Systems of units available

The CGS system of units (Centimetre—Gram—Second) is a metric coherent system of units that is based on the units centimetre, gram, and second. However, there are a number of concurrent extensions for electromagnetic units. STN Messenger accepts these systems:

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS</td>
<td>The centimeter-gram-second system</td>
</tr>
<tr>
<td>ENG</td>
<td>Customary U.S. Engineering units</td>
</tr>
<tr>
<td>FPS</td>
<td>The foot-pound-second system</td>
</tr>
<tr>
<td>MKS</td>
<td>The meter-kilogram-second system</td>
</tr>
<tr>
<td>SI</td>
<td>Systém Internatiaonal d’unites (International system) based on the MKS system</td>
</tr>
<tr>
<td>STN</td>
<td>Customary units based on the SI-system</td>
</tr>
</tbody>
</table>

If a search is performed in one system of units documents using a different unit for a particular property will be found anyway, e.g.:

```plaintext
=> FIL WPINDEX
=> S 100000-200000/PRES
L1 74521 100000 PASCAL - 200000 PASCAL /PRES
=> S 1-2 BAR/PRES
L3 74521 1-2 BAR/PRES
```

The SET command can be used to define a preferred unit, e.g. to set Fahrenheit as the preferred unit for the temperature use:

```plaintext
=> SET UNIT TEMP=F PERMANENT
```

It is recommended to use the CGS system:

```plaintext
=> SET UNITS ALL=CGS
```

42.3.4 Searching

The data received can be searched in the context of the original text, i.e. they can be linked to a keyword search using proximity operators in order to obtain a more relevant search result. Exact numbers as well as closed or open intervals can be searched. By using SET TOLERANCE an absolute or relative tolerance range can be defined for each quantity, this can even be made permanent with the PERMANENT option:

```plaintext
=> SET TOLERANCE
ENTER FIELD CODES AND TOLERANCES OR (END): TEMP=10%
ENTER FIELD CODES AND TOLERANCES OR (END): END
```

The example below shows a search for a length in the nanometer range:

```plaintext
=> FIL PCTFULL

=> S SIZE (3A) SIZ<=100NM

=> D KWIC 1-5
L1 ANSWER 1 OF 17287 PCTFULL COPYRIGHT 2011 LNU on STN

DETDEN ... particles with an average particle size of from approximately 3 to 100 nanometers, and a...

DETDEN ... 30 to 300 or even 100 nanometer size range results in a significant ...

DETDEN ... SiC powder with an average size of 90 nanometers was added and the ...

DETDEN ... TiO2 powder having a particle size of about 50 nanometers is added to
```
Types of search

finally...

The examples below shows various options for entering “nanometers”.

Using exponential representation.

\[ \Rightarrow S \ \text{SIZE} \ (3A) \ \text{SIZE} \leq 1.0 \times 10^{-7} \]

756526 SIZE
112220 SIZE \leq 1.0 \times 10^{-7} M

L2 17287 SIZE (3A) SIZE \leq 1.0 \times 10^{-7} M

The basic unit for the length is “metre”.

\[ \Rightarrow S \ \text{SIZE} \ (3A) \ \text{SIZE} \leq 0.0000001 \]

756526 SIZE
112220 SIZE \leq 0.0000001 M

L3 17287 SIZE (3A) SIZE \leq 0.0000001 M

The table below shows the search options:

<table>
<thead>
<tr>
<th>Search option</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard units</td>
<td>=&gt; S 50/VOL</td>
</tr>
<tr>
<td>L1 454 50 M^3/VOL</td>
<td></td>
</tr>
<tr>
<td>Intervals</td>
<td>=&gt; S 50-60/VOL</td>
</tr>
<tr>
<td>L2 599 50 M^3 - 60 M^3/VOL</td>
<td></td>
</tr>
<tr>
<td>Other units</td>
<td>=&gt; S 10-30 ML/VOL</td>
</tr>
<tr>
<td>L3 114646 10-30 ML/VOL</td>
<td></td>
</tr>
<tr>
<td>Open intervals</td>
<td>=&gt; S SIZE &lt; 5 MM</td>
</tr>
<tr>
<td>L4 463893 SIZE &lt; 5 MM</td>
<td></td>
</tr>
<tr>
<td>Absolute tolerance</td>
<td>=&gt; S 5 MM +/- 1/SIZE</td>
</tr>
<tr>
<td>L4 160136 5 MM +/- 1/SIZE</td>
<td></td>
</tr>
<tr>
<td>Relative tolerance in %</td>
<td>=&gt; S 5 MM +/- 5%/SIZE</td>
</tr>
<tr>
<td>L6 113784 5 MM +/- 5%/SIZE</td>
<td></td>
</tr>
</tbody>
</table>

The availability of searchable properties can be checked in the /PHP field:

\[ \Rightarrow S \ \text{MW}/\text{PHP} \ (5A) \linebreak (\text{?BLOCK} \ ?\text{POLYM} \ OR \ (\text{?BLOCK} \ (T) ?\text{POLYM})) \]

L7 163 MW/PHP (5A) ( ?BLOCK ?POLYM OR ( ?BLOCK (T) ?POLYM))

\[ \Rightarrow D \ \text{KWIC} \ 1.5 \]

DETDEN...
After quenching, the resultant iPF-block-PEP diblock copolymer had an Mn = 122 kg/mol and MJ Mn = 1.20...

DETDEN... molecular weight of the Polyoxyalkylen Blockcopolymers 200000 g/mol, prefers 100000 g/mol and particularly prefers 50000...

\[ \Rightarrow S \ \text{SIZE}/\text{PHP} \ (S) \ (\text{LIPOSOM} \ OR \ (\text{LIPID} \ (W) \ VESICL))) \]

L8 9531 SIZE/PHP (S) (LIPOSOM OR (LIPID (W) VESICL)))

\[ \Rightarrow D \ \text{KWIC} \]

DETDEN... by entrapping the drug in liposomes or microemulsions which are compatible... size in the range of 0.01 to 10 micrometers.

42.3.5 The EX operator

(NPS Version 2)

When searching an open range (e.g. S LEN\geq3) or an exact value (e.g. S 4/LEN) it may be that hits like this are found: “more than 1 meter” because the whole range is indexed in this case. To prevent this the EX operator can be used: S LEN. EX\geq3. This excludes documents where the value is lower than 3 meters, such as this:

Member... relates to thread/yarn entanglement prevention of a fishing rod. The effect of the invention of Example 15 since it is at least 5 cm or more separated from the front-end/tip part of a pole of the fishing line and the fishing rod by... rod of normal. The effect of the invention of Example 25 since the fishing line and the fishing rod are at least 5 cm
Guide to STN Patent Databases

or more separated with the pipe in which the front-end|tip part of the pole was bent although the fishing ... it can use as a fishing rod of normal. The effect of the invention of Example 3. Since it is at least 5 cm or more separated from the front-end|tip part of a pole of the fishing line and the fishing rod by ...
### 43 Search by name

#### 43.1 Important fields for a name search

<table>
<thead>
<tr>
<th>Databases</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Notes</th>
<th>Index form (see below)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUPATFULL, CANPATFULL, CNFUL, DEFULL, DWPI, EPFULL, FRANCEPAT, FRFULL, GBFULL, INFULL, INPADOCDB, INPAFAMDB, JPFULL, KOREAPAT, LITALERT, PATDPA, PATDPAFULL, PCTFULL, RUSSIAPAT, USGENE, USPATOLD</td>
<td>/IN</td>
<td>IN</td>
<td>Inventor (Author)</td>
<td>Mixed index</td>
</tr>
<tr>
<td></td>
<td>/AU</td>
<td>AU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INPADOCDB, INPAFAMDB</td>
<td>/INS</td>
<td>INS</td>
<td>Inventor in INPADOC standard</td>
<td>Mixed Index</td>
</tr>
<tr>
<td></td>
<td>/PAS</td>
<td>PAS</td>
<td>Assignee in INPADOC standard</td>
<td>Mixed index with system interpretation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USPATOLD</td>
<td>/IN</td>
<td>IN</td>
<td>Inventor</td>
<td>Mixed index with system interpretation</td>
</tr>
<tr>
<td></td>
<td>/AU</td>
<td>AU</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>/PA</td>
<td>PA</td>
<td>Assignee (Corporate Source)</td>
<td>Mixed index with system interpretation</td>
</tr>
<tr>
<td></td>
<td>/CS</td>
<td>CS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDD</td>
<td>/IN, /IN.W</td>
<td>IN</td>
<td>Inventor (Author)</td>
<td>Word index</td>
</tr>
<tr>
<td></td>
<td>/AU, (/AU.W)</td>
<td>AU</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>/PA, (/PA.W)</td>
<td>PA</td>
<td>Assignee (Corporate Source)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/CS, (/CS.W)</td>
<td>CS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>/IN.S</td>
<td>IN</td>
<td>Inventor (Author)</td>
<td>Phrase index</td>
</tr>
<tr>
<td></td>
<td>/PA.S</td>
<td>PA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA, DPCI, DGENE, ENCOMPPAT2, IFIALL*, JAPIO, USPATFULL, USPAT2</td>
<td>/IN</td>
<td>IN</td>
<td>Inventor (Author)</td>
<td>Mixed index with system interpretation</td>
</tr>
<tr>
<td></td>
<td>/AU</td>
<td>AU</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>/PA</td>
<td>PA</td>
<td>Assignee (Corporate Source)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/CS</td>
<td>CS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMSPATENTS</td>
<td>/PA</td>
<td>PA</td>
<td>Assignee (Corporate Source)</td>
<td>Mixed index with system interpretation; no inventors</td>
</tr>
<tr>
<td></td>
<td>/IB, /CO</td>
<td>CO, PA</td>
<td>Corporate Name</td>
<td></td>
</tr>
<tr>
<td></td>
<td>/CS</td>
<td>CS</td>
<td>Corporate Source</td>
<td></td>
</tr>
<tr>
<td>PCTGEN, RDISCLOSURE</td>
<td>/PA, /CS</td>
<td>PA, CS</td>
<td>Assignee</td>
<td>Mixed index with system interpretation; no inventors</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDD</td>
<td>/PAS, /PAS.W</td>
<td>PAS</td>
<td>Assignee</td>
<td>Word index</td>
</tr>
<tr>
<td></td>
<td>/PAS.S</td>
<td></td>
<td></td>
<td>Phrase index</td>
</tr>
<tr>
<td>DWPI, WPIFV, DPCI, DGENE</td>
<td>/PACO</td>
<td>in PA</td>
<td>Assignee Code</td>
<td></td>
</tr>
<tr>
<td>CANNOTFULL, DWPI, PATDPA, EPFULL, PATDPAFULL, USPATFULL, USPAT2</td>
<td>/AG</td>
<td>AG</td>
<td>Agent</td>
<td>Mixed index with system interpretation</td>
</tr>
<tr>
<td>IFIALL, FRANCEPAT</td>
<td>/AG</td>
<td>AG</td>
<td>Agent</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Word index</td>
</tr>
<tr>
<td>RUSSIAPAT</td>
<td>/AG</td>
<td>AG</td>
<td>Agent</td>
<td>Mixed index</td>
</tr>
<tr>
<td></td>
<td>/CA</td>
<td>CA</td>
<td>Corporate Address (Agent)</td>
<td>Mixed index</td>
</tr>
<tr>
<td>PATDPA, EPFULL</td>
<td>/OP</td>
<td>OP</td>
<td>Opponent**</td>
<td>Mixed index</td>
</tr>
<tr>
<td>LITALERT</td>
<td>/OW</td>
<td>OW</td>
<td>Owner</td>
<td>Mixed index with system interpretation</td>
</tr>
</tbody>
</table>

(In the individual patent databases, a great variety of further name fields are available. To list them all would exceed the limits of this publication. It is recommended to keep informed by means of the documentation of the individual databases.)

* – In IFIALL there is another field for applications, /PPA (Probable Patent Assignee).

** – In INPADOCDB and INPAFAMDB an opponent can be searched in the /LSOP field. If the applicant name changes, e.g. due to a company merger, this can often be seen from the Legal Status in the LSPA field, however, the name may remain unchanged in the PA field.

245
43.2 Index types in name fields

**Word Index:** This index form considers solely the single words of a name. Normally the (S) proximity operator is predefined. If the search statement is S Procter & Gamble/PA, then Procter and Gamble may appear in any order of succession in the relevant name field of the same record.

**Phrase Index:** In this case names are only available as bound phrases. If you enter S Fischer Artur/IN, the system will search accordingly (watch out for punctuation!). Consequently, the searcher should closely follow the rules of the database searched.

**Mixed Index:** In a mixed index the names are listed both broken up in single words and in full (as a phrase). When entering S Fischer/IN, the word Fischer is searched, entering S Fischer Artur/IN will result in a search for that very phrase.

**Mixed Index where the System interprets the Query:** As in the mixed index above, single words and phrases are listed together. Here, however, the query S Procter & Gamble/PA results in a search by single words using implied (S) proximity. Entering "Procter & Gamble"/PA (using quotation marks) will lead to a search with bound phrases. New or redesigned databases will in most cases be set up with this type of index for the Patent Assignee (/PA) field.

For an overview on the index types used in the various patent databases see the table above.

43.3 Notes for all databases

For name searches the use of the EXPAND command is highly recommended as it offers a number of advantages:

- You will see which kind of index is available in the database used.
- The various spellings of the name are shown.

Searches for inventors can be continued based on the results obtained by EXPAND. However, a search for assignees in most cases requires a more in-depth search strategy as company names may vary considerably (e.g. the sequence of the parts of the name).

If a name contains ‘Umlauts’, one should search both with the dissolved umlaut (ae for ä) and with the basic vowel instead of the umlaut (a for ä).

Some databases have entries with special characters (e.g. –, &i) in the non-standardised Assignee Name field. To find such name entries with an EXPAND command the special characters must be entered.

In a crossover search, it is recommended to search only for the main parts of the name. If a multipart name is searched, use of (S)-Proximity is appropriate. In some of the databases other proximity operators, such as (W), are not permitted.

43.4 Notes on individual countries

43.4.1 US

In published US patent applications the patent assignee is often not shown, but only the inventor(s). Only once a patent is granted the patent assignee is registered. This may be a problem with name searches, in particular when monitoring patents (see "Monitoring Patents"). There are a number of opportunities to find the company affiliation of an inventor:-

In some databases (DWPI, USPATFULL, IFIALL) the AG field contains the representative (agent), from which a likely patent owner can often be concluded.
Types of search

If the invention is not only filed in US the owner can be retrieved in an international database through the family members:

L1  ANSWER 15003 OF 66460  IFI ALL COPYRIGHT 2013 IFI on STN
AN  13459750  IFI ALL
TI  METHOD AND JIG FOR HOLDING SILICON WAFER
IN  Ono Toshiaki (JP); Hoshino Yumi (JP)
PA  Unassigned or assigned to individual (68000)
PI  US 20130140752  A1  20130606

L2  ANSWER 1 OF 1  WPINDEX COPYRIGHT 2013 THOMSON REUTERS on STN
AN  2008-E71734  (200832)  WPINDEX
TI  Silicon wafer holding method for e.g. heat treatment process, involves specifying holding position at wafer edge portion at predetermined degree along predetermined direction from center point of silicon wafer
IN  HOSHINO Y; ONO T
PA  (HOSHI-1) HOSHINO Y; (ONOT-1) ONO T; (SMCP-C) SUMCO CORP
PI  WO 2008047697  A1 20080424 (200832) JA
TW 2008030455  A  2009036  ZH
KR 2009064420  A  20090618  (200944) KO
DE 112007002287 T5 20090910  (200959) DE
US 20100025909 A1 20100204  (201011) EN
KR 10331100 B1 20110506 (201142) KO
TW 351073 B1 20111021 (201270) ZH
US 8419001 B2 20130416 (201326) EN
US 20130140752 A1 20130606 (201338) EN

In PCT applications the applicants are distinguished between applicants for US and for other countries:

L26  ANSWER 1 OF 5395  PCTFULL COPYRIGHT 2004 Univentio on STN
IN  THOMAS, Howard, 8 The Avenue, Cirencester, Gloucestershire GL7 1EJ, GB
(MB, GB);
MESSER, Victoria, Kate, 28 West End, Melksham, Wiltshire SN12 6AY, GB
(MB, GB)
PA  MOTOROLA INC, 1303 E.Algonquin Road, Schaumburg, IL 60196, US [US, US], for all designates States except US;
THOMAS, Howard, 8 The Avenue, Cirencester, Gloucestershire GL7 1EJ, GB
(MB, GB), for US only;
MESSER, Victoria, Kate, 28 West End, Melksham, Wiltshire SN12 6AY, GB
(MB, GB), for US only;
PI  WO 2004016022  A1 20040219

A change of ownership is registered in INPADOCDB into the legal status (see section INPADOCDB/INPAFAMDB), in CAplus and USPATALL this change is registered in the RAI field (Reassignment Information). By including these fields into a name search, the name search can be more compile:

=> FI L USPATFULL
=> S INTEL/PA, RAA
10955 INTEL/PA
3013 INTEL/RAA
L17 13905 INTEL/PA, RAA

=> D PA HIT 5

ASSIGNMENT HISTORY FOR US 20090259787
RAI  RAD: 20090203
RAUP: 20091015
RAK: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS)
PAO: ELGOUSI, MUHAMMED (DATE EXECUTED: 20090120)
KAR, JAYASHREE (DATE EXECUTED: 20090202)
FIGUEROA, DAVID G. (DATE EXECUTED: 20090122)
VENKATARAMAN, SRIKRISHNAN (DATE EXECUTED: 20090120)
RAC: INTEL CORPORATION, 2200 MISSION COLLEGE BOULEVARD, SANTA CLARA, CALIFORNIA 95052-5326, UNITED STATES
RAA: INTEL CORPORATION C/O INTELLEVATE LLC, P.O. BOX 52050, MINNEAPOLIS, MN 55402
MRN: 22197 MFN: 676 (7 Page(s))
43.4.2 Germany

In German patent applications the inventor does not have to be named:

L7 ANSWER 1 OF 1 PATDPAFULL COPYRIGHT 2014 DPMA on STN
TI Oxidationsfärbemittel
IN Erfinder wird später genannt werden (EWSG)
PA Hans Schwarzkopf GmbH & Co. KG, 22763 Hamburg, DE
PI DE 19728147 A1 19980618

In such a case the inventor can be found through an equivalent (international or European) application:

L9 ANSWER 1 OF 1 EPFULL COPYRIGHT 2014 EPO/FIZ KA/LNU on STN
TIEN OXIDATION DYES.
TIFR COLORANTS D’OXYDATION.
TIDE OXIDATIONSFAERBBEMITTEL.
IN BITTNER, Andreas, Joachim, Wiesenstrasse 11, D-63071 Offenbach, DE; KLEEN, Astrid, Vennhauser Allee 203, D-40627 Düesseldorf, DE
PA Hans Schwarzkopf GmbH & Co. KG, (Schwarzkopf GmbH & Co. KG, Hans), Hohenzollernring 127, 22763 Hamburg, DE
PI EP 912160 A2 19990506
WO 9801106 19980115

Only the applicant is named in utility models.

43.4.3 Japan

An inconvenience of Japanese patent publications is that the names of inventors and assignees need to be converted from Japanese characters (as shown on the document) to Roman characters (the way they appear in the database).

- Japanese proper names are written in Chinese characters (Kanji). Kanji may have various readings and hence completely different pronunciations. A conversion into Roman characters yields, therefore, not always clear results.

- Foreign proper names are converted according to their pronunciation into Japanese syllable writing (Katakana). For integration in the database they are re-converted following specific rules. In particular accumulations of consonants frequently found in European names cannot be converted adequately into Katakana. As a result, foreign names are in most cases not recognizable after two consecutive conversions.

This concerns especially person names. Therefore they are not entered sometimes (DWPI to 6/2005, they are entered after that date). For companies there are usually adequate conversions into Roman characters or it is known which foreign company ‘hides’ behind a specific syllable sequence.

AN 33078029 INPADOCDB UP 20080225 UW 200808
TI DIFFERENTIAL GEAR FOR AXLE DRIVING DEVICE OF AUTOMOBILE.
TL English
IN EDOMUNTO SANDERU; PEETAA MEFUERUTO; PEETAA HEEBERU
INS EDOMUNTO SANDERU; PEETAA MEFUERUTO; PEETAA HEEBERU
PA DR ING H C F PORSCHE AG
PAS PORSCHE AG
DT Patent
PI JP 08312753 A 19961126
PIT JPA DOC. LAID OPEN TO PUBL. INSPEC. [PUBLISHED FROM 1971 ON]
DAV 19961126 unexamined printed without grant
STA PRE-GRANT PUBLICATION
AI JP 1995-118698 A 19950517
AIT JPA Patent application
PRAI JP 1995-118698 A 19950517 (JPA)
PRAIT JPA Patent application

43.4.4 Russia

With Russian names similar problems arise due to conversion. Non-Russian names are often changed very much. This applies both to names of companies and person names. In addition to that person names are often entered very differently: family name + initial(s), family name + full first name(s), changing sequence of the name parts. This can make name searches difficult in RUSSIAPAT. In INPADOCDB and INPAFAMDB the standardised /PAS field can help. In DWPI and CAPLUS the names are usually edited to a better standard. This partly applies even to national Russian applications having no corresponding foreign applications.
Types of search

AN 2003:017349 RUSSIANPAT ED 20050304
IN SIMPSON Ehntoni Dzhofez (GB); KHEJNZMAN Stiven Uehjn (GB); DZHENSEN Dzhudit Ehster (GB)
PA
PA, AP DZE PROKTER EHND GEHMBL KOMPANI (US)
PA, AS DZE PROKTER EHND GEHMBL KOMPANI (US)

AN 41068442 INPADOC UP 20080131 UW 2008052
IN SIMPSON EHNTONI DZHOZEF; KHEJNZMAN STIVEN UEHJN; DZHENSEN DZHUDIT EHSTER
IN SIMPSON EHNTONI DZHOZEF, GB; KHEJNZMAN STIVEN UEHJN, GB; DZHENSEN DZHUDIT EHSTER, GB
PA DZE PROKTER EHND GEHMBL KOMPANI
PAS PROCTER & GAMBLE, US

AN 1999:388081 [33] WPI INDEX
IN HEINZMAN, W S; JANSEN, E J; SIMPSON, J A; HEINZMAN, S W; JANSEN, J E; SIMPSON, A J
PA (PROC) PROCTER & GAMBLE CO; (PROC) PROCTER & GAMBLE CELLULOSE CO

AN 1999:495148 HCAPPLUS
DN 131:134645
TI Antienzyme compositions comprising ethylenediamine disuccinic acid
IN Simpson, Anthony Joseph; Heinzman, Stephen Wayne; Jansen, Judit Ester
PA The Procter & Gamble Company, USA

43.5 Derwent databases: DWPI, DPCI, DGENE

43.5.1 Inventor

The Inventor (/IN) field in DWPI has a mixed index where the family names plus (possibly several) initials are entered. Individual words (name or initial alone) or the name together with initial(s) are searchable. Thus, it is possible to search by family name alone or by family name together with the initial(s); it may be necessary to use truncation:

```
=> S BRANDENBURG/IN
L1 324 BRANDENBURG/IN

=> S BRANDENBURG K/IN
L2 71 BRANDENBURG K/IN

=> S BRANDENBURG K?/IN
L3 76 BRANDENBURG K?/IN
```

The parts of a name can be linked with (S) proximity:

```
=> S (BRANDENBURG (S) K)/IN
L10 2632995 K/IN
L10 81 (BRANDENBURG (S) K)/IN
```

The names are normalized in the index, i.e. special characters have been removed.

The name of the Inventor indicated on the first page of the Basic Patent is available in the Inventor field (since 1978). In older documents surnames with more than 10 letters were abbreviated (e.g. Tautzenberger – Tautzenber); more recent documents (from 1985) additionally contain the full name. Both forms should be searched. From 1980, up to 8 Inventor names have been entered, before that time 3 at the most. Similarly, only 3 names are entered for Soviet (SU) patents. Japanese inventors (from A and B publications) are entered from Derwent Week 200537. Inventors from small countries are sometimes missing.

In older documents (up to 1985) names with umlauts are entered only with the corresponding basic vowel (e.g. Müller – Muller); more recent documents additionally contain the name with converted umlaut (Mueller). Both forms should, as a rule, be searched. Multi-part surnames can be searched in various ways, e.g.: von Danwitz is searchable as VONDANWITZ or as VON DANWITZ.

In DPCI and DGENE there is only a phrase index for the inventor names (/IN field), i.e. the family name must be used together with the initial(s) or with truncation, if necessary.
43.5.2 Patent assignee

A mixed index with system interpretation is used for Patent Assignees; individual words from the name therefore appear in one list along with the name ranked as a phrase. Usually a search by single words is assumed. (S) proximity is used automatically:

```plaintext
=> S PROCTER & GAMBLE /PA
   11204 PROCTER/ PA
   11273 GAMBLE/ PA
L2  11170 PROCTER & GAMBLE/ PA
    ((PROCTER(S)GAMBLE)/PA)
```

If the name is to be searched as a phrase it must be entered with quotation marks:

```plaintext
=> S "PROCTER & GAMBLE CO" /PA
L3  11059 "PROCTER & GAMBLE CO"/PA

or

=> S "PROCTER & GAMBLE"? /PA
L4  11169 "PROCTER & GAMBLE"?/PA
```

The truncation character ? must immediately precede the slash and not be included in the quotation marks.

If several entries are contained in the name field every name will be treated as one sentence ((S) proximity). Names in a record are always in alphabetical order (may be different from the Patent Gazette).

The complete name (up to 40 letters) is entered for each Patent Assignee. Until Derwent week 9216, a maximum of 24 letters were used.

Since Derwent week 9216, all Patent Assignees (including those of the Equivalents) are added to the PA field. Prior to this, the number of the patent assignees was limited to 4. Differing patent assignees of the Equivalents have been added since 1976 (Derwent-Week 7648). The names of Patent Assignees (/PA) are searchable since 1970 (year of introduction into the database).

In addition to the name of the Patent Assignee, a code is entered into the database by the database producer (into the PACO field). (For the years 1963 to 1969, only this code is available.) The code consists of four (three up to 1970) letters and, where appropriate, a further symbol of identification:

- `C` for unambiguous codes of major companies (more than 500 documents in the database),
- `I` for individuals acting as assignees,
- `N` for companies which are not part of this group of major companies,
- `R` for institutions of the former Soviet Union and Russia.

The codes are particularly useful as a search tool in the case of the mentioned major companies where they are unambiguous. The patent assignee code can be searched in the /PA field together with the assignee name or individually in the /PACO field. If an Equivalent carries a different name (e.g. because of a change of the company name), the new name is entered in PA and a new code in PACO, where appropriate.

If two companies (having standard codes) merge the patents continue to be entered under both standard codes as long as the companies apply for patents as independent companies. When they change to their new name Derwent / Thomson Scientific do not automatically assign a new standard code but the most suitable code is chosen (either a new code or one of the old codes). The codes in existing documents are not automatically reassigned retrospectively.

A list of codes (both standard and non-standard) and respective assignee names is available on-line in the DWPI database or on the homepage of Derwent / Thomson Scientific (free of charge):


In DWPI a thesaurus is available for the codes. It is both possible to identify the code for a given patent assignee and all the assignees entered under a given code. A mixed index is used. It may be used in three ways:

- EXPAND on /PACO (E _ FARB / PACO) produces an alphabetical list of codes, with all parts of the names and the full names from the PA field. The frequency and number of Associated Terms (AT) is displayed.
Types of search

- EXPAND on a particular code (with hyphen) in /PACO with ALL or DEF relation (E FARB- C+DEF/ PACO) produces all names related to that code.

- EXPAND on a part of the name (without hyphen) in /PACO with ALL relation (E BAYER+ALL/ PACO) produces all codes for that part of name.

The thesaurus is available in DWPI and DPCI, in DPCI also in the /PACO.D and /PACO.G fields.

Examples:

1. EXPAND on /PACO produces an alphabetical list of codes, with pieces of the names and the full names from the PA field:

```
> = E COKE/ PACO
E #   FREQUENCY AT   TERM
. . . . . . . . . . . . . .
E1     1      COKE. N/ PACO
E2     3      COKE- I/ PACO
E3    35      COKE/ PACO
E4     1      COKE CHEM IND ENTERP DES INST/ PACO
E5     1      COKE CHEM IND PLANTS DES INST/ PACO
E6     1      COKE CHEM IND RES INST/ PACO
E7   839      COKE- C/PACO
E8     0      COKE- CHEM/PACO
E9     0      COKE- GAS/PACO
E10    0      COKE- GAS/ PACO
E11    0      COKE- C/PACO
E12    0      COKE- I/ PACO
```

2. EXPAND on a particular code (with hyphen) in /PACO with ALL or DEF relation produces all names related to that code:

```
> = E COKE- C+ALL/ PACO
E1    839      COKE- C/ PACO
         DEF COCA- COLA AMAT I L AUST PTY LTD
         DEF COCA- COLA ASIA PACIFIC KENKYU KAI HATSU
         DEF COCA- COLA ASIA PACIFIC RES & DEV CO LTD
         DEF COCA- COLA BEVERAGE SERVICE KK
         DEF COCA- COLA CO
         DEF COCA- COLA CO LTD
         DEF COCA- COLA ENTERPRISES INC
         DEF COCA- COLA ENTERPRISES LTD
         DEF COCA- COLA ERFRISCHUNGSGTRAENKE AG
         DEF COCA- COLA GMBH
         DEF COCA- COLA JAPAN CO LTD
         DEF COCA- COLA LTD
         DEF COCA- COLA PACIFIC GI JUTSU CENT KK
         DEF KI NKI COCA- COLA BOTTLING KK
         DEF KITA KYUSHU COCA- COLA BOTTLING KK
         DEF NIPPON COCA- COLA CO LTD
         DEF SANYO COCA- COLA BOTTLING KK
         DEF SHIKOKU COCA- COLA BOTTLING KK
         DEF TOKYO COCA- COLA BOTTLING CO LTD
         DEF TOKYO COCA- COLA BOTTLING KK
         DEF TOKYO COCA- COLA KK
         DEF TONE COCA- COLA BOTTLING KK
```

3. EXPAND on a part of a name (without hyphen) in /PACO with ALL relation produces all codes for that piece of name:

```
> = E COKE+ALL/ PACO
E1     0      COKE/ PACO
E2    20      CODE ALCH- R/ PACO
E3    19      CODE AVDE- R/ PACO
E4  4708      CODE BEIJ- N/ PACO
E5     8      CODE BRCT- C/ PACO
E6   329      CODE CITI- N/ PACO
E7   234      CODE COKE- R/ PACO
E8   395      CODE DETR- N/ PACO
```
The PAX select field produces a list of codes and names. The PAX field may be used with the SELECT, ANALYZE or TABULATE commands. Since one assignee code can be associated with several name entries the EDIT command should be used to combine the entries of the resulting table (cf. "Patent statistics"):

```plaintext
=> S E36
L1  2 YEOC-R/PACO

=> D PA

L1  ANSWER 1 OF 2 WPINDEX COPYRIGHT 2007 THE THOMSON CORP on STN
PA (YEOC-R) GEOCHEM COKE CHEM RES INST

The PAX select field produces a list of codes and names. The PAX field may be used with the SELECT, ANALYZE or TABULATE commands. Since one assignee code can be associated with several name entries the EDIT command should be used to combine the entries of the resulting table (cf. "Patent statistics"):

=> S DATA(4A) TRANSMISSION AND MOBILE(2W) (PHONE OR TELEPHONE) AND 2003/PY.B
L1  351 DATA(4A) TRANSMISSION AND MOBILE(2W) (PHONE OR TELEPHONE) AND 2003/PY.B

=> ANA L1 PAX
L2  ANALYZE L1 1- PAX : 344 TERMS

=> D 1-15
L2  ANALYZE L1 1- PAX : 344 TERMS

TERM # # OCC # DOC % DOC PAX

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>20</td>
<td>5.70 (SIEI-C) SIEMENS AG</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>17</td>
<td>4.84 (MATSUHI TA ENKI SANGYO KK)</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>17</td>
<td>4.84 (SONY-C) SONY CORP</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
<td>14</td>
<td>3.99 (FUJI-F-C) FUJI PHOTO FILM CO LTD</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
<td>12</td>
<td>3.42 (MITSUBISHI ELECTRIC CORP)</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>10</td>
<td>2.85 (CANON-C) CANON KK</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>10</td>
<td>2.85 (NIDE-C) NEC CORP</td>
</tr>
<tr>
<td>8</td>
<td>10</td>
<td>10</td>
<td>2.85 (SHI-C) SEIKO EPSON CORP</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>10</td>
<td>2.85 (TOKE-C) TOSHIBA KK</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
<td>7</td>
<td>1.99 (HITA-C) HITACHI LTD</td>
</tr>
<tr>
<td>11</td>
<td>7</td>
<td>7</td>
<td>1.99 (NITE-C) NTT TSUSI NMO KK</td>
</tr>
<tr>
<td>12</td>
<td>7</td>
<td>7</td>
<td>1.99 (ONY-C) NOKIA CORP</td>
</tr>
<tr>
<td>13</td>
<td>6</td>
<td>6</td>
<td>1.71 (SHAF-C) SHARP KK</td>
</tr>
<tr>
<td>14</td>
<td>5</td>
<td>5</td>
<td>1.42 (NITE-C) NTT DOCOMO INC</td>
</tr>
<tr>
<td>15</td>
<td>5</td>
<td>5</td>
<td>1.42 (PHIG-C) KONINK PHILIPS ELECTRONICS NV</td>
</tr>
</tbody>
</table>
```
43.5.3 Notes on name searches in publication level

In DWPI, the fields shown in the table above refer to the invention level and partly to the publication level. The search can be limited e.g. to the publication level:

=> S BADI - C/PACO (L) PUBLICATION/DLVL
L35 29912 BADI - C/PACO (L) PUBLICATION/DLVL

These fields exist only on the publication level:

<table>
<thead>
<tr>
<th>Only publication level:</th>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Definition</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>INO</td>
<td>INA, INO</td>
<td>Inventor, Original (family name, full first name(s) or initials)</td>
<td>Mixed index</td>
<td></td>
</tr>
<tr>
<td>INA</td>
<td>INO</td>
<td>Inventor Address</td>
<td>Mixed index (groups of words are indexed)</td>
<td></td>
</tr>
<tr>
<td>IN.T</td>
<td>INO</td>
<td>Name and complete Inventor Address</td>
<td>Mixed index (every word is indexed)</td>
<td></td>
</tr>
<tr>
<td>INA.CNY</td>
<td>INO</td>
<td>Inventor Address, Country (e.g. DE)</td>
<td>Word index</td>
<td></td>
</tr>
<tr>
<td>INA.CTY</td>
<td>INO</td>
<td>Inventor Address, City (e.g. Berlin)</td>
<td>Word index</td>
<td></td>
</tr>
<tr>
<td>PAO</td>
<td>PAA, PAO</td>
<td>Patent Assignee, Original</td>
<td>Mixed index with system interpretation</td>
<td></td>
</tr>
<tr>
<td>PAA</td>
<td>PAA</td>
<td>Patent Assignee, Address</td>
<td>Mixed index (groups of words are indexed)</td>
<td></td>
</tr>
<tr>
<td>PA.T</td>
<td>PAA</td>
<td>Patent Assignee, Name and full Address</td>
<td>Mixed index (every word is indexed)</td>
<td></td>
</tr>
<tr>
<td>PAA.CNY</td>
<td>PAA</td>
<td>Patent Assignee, Country (e.g. GB)</td>
<td>Word index</td>
<td></td>
</tr>
<tr>
<td>PAA.CTY</td>
<td>PAA</td>
<td>Patent Assignee, City (e.g. London)</td>
<td>Word index</td>
<td></td>
</tr>
<tr>
<td>PAA.LIM</td>
<td>PAA</td>
<td>Patent Assignee, Limitation (for US Applications, e.g. only US))</td>
<td>Word index</td>
<td></td>
</tr>
<tr>
<td>PAA.NAT</td>
<td>PAA</td>
<td>Patent Assignee, Nationality (e.g. SE)</td>
<td>Word index</td>
<td></td>
</tr>
<tr>
<td>PAA.RES</td>
<td>PAA</td>
<td>Patent Assignee, Residence (e.g., FR)</td>
<td>Word index</td>
<td></td>
</tr>
<tr>
<td>AG</td>
<td>AGA</td>
<td>Agent</td>
<td>Mixed index with system interpretation</td>
<td></td>
</tr>
<tr>
<td>AGA</td>
<td>AGA</td>
<td>Agent, Adresse</td>
<td>Mixed index (groups of words are indexed)</td>
<td></td>
</tr>
<tr>
<td>AG.T</td>
<td>AGA</td>
<td>Agent, Name and full Address</td>
<td>Mixed index (groups of words are indexed)</td>
<td></td>
</tr>
<tr>
<td>AGA.CNY</td>
<td>AGA</td>
<td>Agent, Country</td>
<td>Word index</td>
<td></td>
</tr>
<tr>
<td>AGA.CTY</td>
<td>AGA</td>
<td>Agent, City</td>
<td>Word index</td>
<td></td>
</tr>
</tbody>
</table>

The fields available at publication level only are original data and available from these patent offices only:

- German patent applications, patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) from 1968
- PCT applications (WO-A1/A2) from 1978
- Japanese patent applications (J-P-A) from 1977 (no address information, no agent information)

To find out about different spellings the use of EXPAND is absolutely recommended:

=> E MASSONNE K/I NO
E1 2 MASSONNE, NI COLAS/I NO
E2 42 MASSONNE/I NO
E3 8 MASSSONNE K/I NO
E4 1 MASSONNE KLEMS DR/I NO
E5 12 MASSONNE, JOACHIM/I NO
E6 29 MASSONNE, KLEMS/I NO
E7 9 MASSONNEAU/I NO
E8 1 MASSONNEAU, MARC/I NO
E9 8 MASSONNEAU, VIVIANE/I NO
E10 13 MASSONNET/I NO
E11 4 MASSONNET, D/I NO
E12 1 MASSONNET, ALBERT/I NO

(S)-proximity is implied in fields with mixed index with system interpretation.

In fields with mixed index (P)-proximity should be used to link different parts of the names (no implied proximity):

=> S (MASSONNE (P) KLEMS)/I N T
83 MASSONNE/I N T
1208 KLEMS/I N T
L11 37 (MASSONNE (P) KLEMS)/I N T
Guide to STN Patent Databases

The original names (INO, PAO, AG) are separated from the other address information (INA, PAA, AGA). Thus, certain address components can be used to restrict the search. The different fields are linked with (L)-proximity:

Limiting the patents of Intel to applications of the Irish subsidiary.

=> S INTEL/PAO (L) {IE OR IRELAND}/PAA
   13356 INTEL/PAO
   6642 IE/PAA
   215 IRELAND/PAA
L5
   3 INTEL/PAO (L) {IE OR IRELAND}/PAA

As the data cannot always be properly identified the additional fields IN.T, PA.T, and AG.T were introduced. These fields contain the complete name and every single word is searchable.

It is useful to include the AG field in a patent assignee search as the patent assignee is often not available for US patent applications.

=> S SYNGENTA/PA, AG OR SYGN-C/PACO
   1147 SYNGENTA/PA
   432 SYNGENTA/AG
   1121 SYGN-C/PACO
L7
   1177 SYNGENTA/PA, AG OR SYGN-C/PACO

The use of the AG field yields 30 more documents in this example.

=> D BIB MEMB
L9
   ANSWER 1 OF 30 WPINDEXR COPYRIGHT 2006 THE THOMSON CORP on STN
AN
   2006-116367 [12] WPINDEXR
CR
   2002-114279
DNC
   C2006-041111 [12]
TI
   Preparation of 3-alkylbenzoxazine useful as intermediate for acylamides involves forming ortho-nitrophenoxycetone by reacting ortho-nitrophenol and haloacetone in the presence of aromatic hydrocarbon solvent and phase-transfer catalyst
DC
   CO2
IN
   Munson, C; Munson, R E; Oliver, M A; Schwemlein, H P
PA
   (MUNSON) Munson, C; (MUNSON) Munson, R E; (OLIVER) Oliver, M A; (SCHW) Schwemlein, H P
CYC
   1
PI
   US 20060014946 A1 20060119 (200612)* EN 5 /0

Member (0001)
PI
   US 20060014946 A1 20060119 (200612)* EN 5 /0
TIEN
   Method for making acylamides by synthesizing and acylating benzoxazines
AG
   SYNGENTA CROP PROTECTION, INC., PATENT AND TRADEMARK DEPARTMENT
   AGA: 410 SWING ROAD, GREENSBORO, NC, US
PA
   (MUNSON) Munson, Robert Eugene
   PAO: Munson, Robert Eugene
   PAA: Baton Rouge, LA, US
   Residence: US
   Nationality: US
   (MUNSON) Munson, Catherine
   PAO: Munson, Catherine
   PAA: Baton Rouge, LA, US
   Residence: US
   Nationality: US
   (OLIVER) Oliver, Michael Allen
   PAO: Oliver, Michael Allen
   PAA: Daphne, AL, US
   Residence: US
   Nationality: US
   (SCHW) Schwemlein, Heinz Peter
   PAO: Schwemlein, Heinz Peter
   PAA: Mobile, AL, US
   Residence: US
   Nationality: US
43.6  INPADOCDB, INPAFAMDB

For name searches the names of the Inventor (/IN, /INS) and Patent Assignee (/PA, /PAS) are available. The standard name fields /INS (inventor) and /PAS (assignee) should be used in addition: First standardisation assists the formulation of the search query, second sometimes the IN and PA fields do not contain data. To obtain a complete result EXPAND should be used to find the main parts of the name and then a search using (S) proximity be performed:

```plaintext
=> E KNOLL FRITZ /IN, INNS 9
  E1 2 KNOLL FRIEDRICH DIPL ING /INS
  E2 1 KNOLL FRIEDRICH ERNST /INS
  E3 34 => KNOLL FRITZ /IN
  E4 38 KNOLL FRITZ /INS
  E5 2 KNOLL FRITZ 7750 KONSTANZ DE /IN
  E6 1 KNOLL FRITZ DE /IN
  E7 1 KNOLL FRITZ DIPL BIO L /IN
  E8 1 KNOLL FRITZ DIPL BIO L /INS
  E9 1 KNOLL G /IN

=> S (KNOLL(S) FRITZ) /IN, INNS
L1 48 (KNOLL(S) FRITZ) /IN, INNS

=> D 1 2 INNS
```

Names with Umlauts should be searched both with a converted umlaut (Müller – Mueller) and the corresponding basic vowel (Muller). For example for the name Gebrüder Bühler these variations were found:

Gebrueder Buehler
Gebruder Buhler
Gebryder Byler

In the case of the German double-s ligature ß conversion into ss or sz must be considered. It is advisable to truncate this as s!

A (probably multiple) transliteration (Latin to Cyrillic, Japanese or Hebrew and return) can change the spelling of a name beyond recognition.

In INPADOCDB and INPAFAMDB an opponent can be searched in the /LSOP field. If the applicant name changes, e.g. due to a company merger, this can often be seen from the Legal Status in the LSPA field, however, the name may remain unchanged in the PA field.

L44 ANSWER 1 OF 3244 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
  PAS KOTANI NAOKI; SEBE AKIO; OKAZAKI GEN; TAMAKI TOKUHIKO
  LEGAL STATUS HIT
  AN 53430616 INPADOCDB
  20060322 USA5 ASSIGNMENT
  BAYER HEALTHCARE AG, GERMANY
  ASSIGNMENT OF ASSIGNS INTEREST; ASSIGNS: GOLZ, STEFAN; BRUGGEMEIER, ULF; SUMMER, HOLGER;
  REEL/FRAME: 017693/0459; SIGNING DATES FROM 20050804 TO 20050824
  CHG Change of Owner, Inventor, Applicant
  .............................................20070705

In order to allow efficient searching of these entries in the legal status fields together with those in the name fields the Super Search Fields /PASS (/PA, /PAS, /LSPA) and /INSS (/IN, /INS, /LSIN) were introduced. (S) is Implied Proximity in the /PA, /PAS, /LSPA, and /PASS search fields.

```plaintext
=> S BOSCH SIEMENS /PASS
  E1 175714 BOSCH /PA
  E2 172535 BOSCH /PAS
  E3 17920 BOSCH /LSPA
```
US applications often do not mention the name of the patent assignee (but rather the names of the inventors in the PA field). With other publications in the patent family mentioning the company name a name search will often yield a better result in INPAFAMDB due to the family structure of this database (see "Family Search"):

```
AN 55870221 INPADOCDB ED 20080228 EW 200809 UP 20080307 UW 200810
IN EVANS JONATHAN A.; SCHLICKER SCOTT C.; LAMBI MARIOS
PAS EVANS JONATHAN A; SCHLICKER SCOTT C; LAMBI MARIOS
FI US 20080038569 A1 20080214 English
```

```
AN 36499394 INPAFAMDB EDF 20080228 UPFB 20080313
PAS EVANS JONATHAN A; SCHLICKER SCOTT C; LAMBI MARIOS
- SCHLICKER SCOTT, US
- BASF AG, DE; EVANS JONATHAN A, US; SCHLICKER SCOTT, US
```

43.7 PATDPA

Search is possible by the names of Inventors (/AU, /IN, /INC, /INO, /INA), Patent Assignees (/CS, /PA, /PAC, /PAO, /PAA) and Agents (/AG). The individual fields are assigned like this (shown here for the Patent Assignee, basically the same for the Inventor fields):

- /CS, /PA: Super-field of /PAC and /PAO
- /PAC: Name of the current assignee
- /PAO: Name of a former assignee
- /PAA: Country, postcode, place of the assignee

In PATDPA a mixed index is used for the Inventor fields and a mixed index with interpretation of the search query for the Patent Assignee fields (implied (S) proximity). Additionally, every name is entered in a number of different variations, one of which is normalized, i.e. special characters, such as comma, hyphen, etc., are removed:

```
=> E WIDER /IN
E1 4 WI DENT ALA IN /IN
E2 2 WI DENT PIERRE /IN
E3 19 .. > WIDER /IN
E4 1 WI DER BERNHARD /IN
E5 1 WI DER CHARLES /IN
E6 1 WI DER CHARLES DI PL IN G /IN
E7 1 WI DER GERHARD /IN
E8 2 WI DER GERHARD DR /IN
E9 1 WI DER GERHARD PD DR /IN
E10 5 WI DER HANS WILHELM /IN
E11 2 WI DER HANS WILHELM DI PL IN G /IN
E12 1 WI DER HARMUT /IN
```

In the /INC and /PAC fields EXPAND shows all special characters, the country, postcode, and place:
Types of search

=> E BOSCH/ PAC 6
E1 1 BOSCAROL PRODUCTION S.R.L. (*IT 39100 BOLZANO)/ PAC
E2 9 BOSCATO/ PAC
E3 60800 => BOSCH/ PAC
E4 1 BOSCH & NOLTES APPARATEN BNA B.V. (*NL PURMEREND)/ PAC
E5 1 BOSCH & SCHERLE (*DE 7000 STUTTGART)/ PAC
E6 2 BOSCH & SOHN FABRIK MEDIZINSCHER APPARATE (*DE 7455 JUNGINGEN)/ PAC
E7 1 BOSCH + SOHN FABRIK MEDIZ. APPARATE GMBH & CO (*DE KG, 7455 JUNGINGEN)/ PAC

The expression in brackets including the place can be searched together with the name as a phrase ("...") or the respective E number can be used. If single words from the name or place are to be searched then the place must be searched in the /INA or /PAA field respectively, linking the search fields by (S) proximity:

=> S BOSCH/ PA (S) STUTTGART/ PAA
   62591 BOSCH/ PA
   104144 STUTTGART/ PAA
L22  53834 BOSCH/ PA (S) STUTTGART/ PAC

Postcodes or a range of postcodes can also be searched:

=> S DE70!!!/ PAA
L23  58456 DE70!!!/ PAA

A mixed index is also used in the /AG (Agent) field. If more than one part of the name is entered (S) proximity is used automatically. To obtain a complete result it may be necessary to explicitly use AND to link parts of the name.

As the place name is entered in a number of different ways (see example below) a search with the place should be done only with the E numbers obtained by EXPAND:

=> E ENGEL UND KOLLEGEN/ AG 8
E1 1 ENGEL K/ AG
E2 1 ENGEL K RECHTSANW AG
E3 113 => ENGEL UND KOLLEGEN/ AG
E4 113 ENGEL UND KOLLEGEN (98527 SUHL)/ AG
E5 1 ENGEL UND KOLLEGEN SUHL/ AG
E6 1 ENGEL UND KOLLEGEN, 98527 SUHL/ AG
E7 31 ENGEL, C. 'DIPL.-ING., PAT.-ANW.' (98527 SUHL)/ AG
E8 30 ENGEL, CHRISTOPH KLAUS (98527 SUHL/ THUERINGEN)/ AG

=> S E6
L24  9 "ENGEL UND KOLLEGEN, 98527 SUHL"/ AG

43.7.1 Notes

No Inventors are entered for utility models, only the Assignee is available. When using DISPLAY and SELECT the PA field is used in place of the IN field.

It may happen that in some cases the first name of an Inventor is erroneously entered in /INA. First names should, therefore, be searched additionally in /INA; the surname in /IN and the first name in /INA must be linked by (S) proximity.

Patdpa has been closed since July, 2011.

43.8 PATDPAFULL

In PATDPAFULL, German postcodes can be searched in the PA and IN fields:

=> S 98693/ IN
L11  1081 98693/ IN

=> D 4 IN
L11  ANSWER 4 OF 1081 PATDPAFULL COPYRIGHT 2012 DPMA on STN
IN Sommer, Ralf, Prof. Dr., 98693, Ilmenau, DE;
Schaefer, Eric, 99089, Erfurt, DE;
Krausse, Dominik, 98693, Ilmenau, DE;
Henning, Eckhard, Dr., 99096, Erfurt, DE
43.9 EPFULL

There are special SEARCH fields for the address details of the inventor, of the patent assignee, of the agent, of the opponent and the agent of the opponent:

- /INA, /PAA, /AGA, /OPA, /OPAGA: Address
- /IN.CNY, /PA.CNY, /AG.CNY, /OP.CNY: Address, Country
- /IN.CTY, /PA.CTY, /AG.CTY, /OP.CTY: Address, City
- /IN.STR, /PA.STR, /AG.STR, /OP.STR: Address, Street
- /PAN, /AGN, /OPN, /OPAGN: Number
- /IN.COM: Comment on the Inventors
- /PA.DS: Designated States

43.10 RUSSIAPAT

The difficulty of searching Russian names is discussed above.

In RUSSIAPAT the Patent Assignee field is divided into PA.AP (Patent Assignee/Applicant) and PA.AS (Patent Assignee/Proprietor). In most cases only of these is filled. In addition these fields exist: /AG (Agent) with the name of the agent (only partly filled) and /CA (Corporate Address, always filled) with the address and the name of the agent.

43.11 Chemical Abstracts, IFIALL, USPATFULL, USPAT2, JAPIO, ENCOMPPAT

43.11.1 Inventor

The /IN (or /AU) field is phrase indexed. Therefore, it can only be searched by phrase. There is no implied proximity:

```plaintext
=> S ANDERA JOSEPH F /IN
L45          4 ANDERA JOSEPH F /IN
```

43.11.2 Patent assignee

The /PA (or /CS) field can be searched by name, country, and the assignee number either as a phrase or single words (mixed index with interpretation of the query). (S) is implied proximity. If the name is to be searched as a phrase it must be included in quotation marks, "..." (cf. DWPI).

43.11.3 CA, CAPLUS

In Chemical Abstracts there is a thesaurus on the /CO field with the most frequent name entries for large companies, which can be used like this:

```plaintext
=> SET EXPAND CONT
=> E BAYER /CO
```

EXPAND is used for the company name Bayer.

```plaintext
E # FREQUENCY AT TERM
--- -------- --- -----
E1 1   BAYEN JEAN /CO
E2 1   BAYENS HAROLD J /CO
E3 93 2   => BAYER /CO
E4 21715 4   BAYER A G /CO
E5 1   BAYER A G DORMAGEN /CO
E6 1   BAYER A G KREFELD UERDINGEN /CO
E7 3   BAYER A G LEVERKUSEN /CO
```
The thesaurus for the name entry yields information on the development of the company and the various names.

NOTES 1863: Friedrich Bayer et. Comp. founded
1925: Farbenfabriken vorm. Friedr. Bayer & Co. merged into I.G. Farbenindustrie AG
1951: I.G. Farbenindustrie AG dissolved and Farbenfabriken Bayer AG reestablished
1954: Mobay Chemical Co. formed
1967: Bayer AG acquired Mobay Chemical Co.
1974: Bayer AG acquired Cutter Laboratories
1977: Chemische Industrie AKU-Goodrich B. V. renamed Ciago BV
1978: Bayer AG acquired Miles Laboratories
1979: Boots Hercules Agrochemicals Co. established
1984: Nor-Am Chemical Co. acquired Boots Hercules Agrochemicals Co.
1989: Miles Inc. acquired Technicon Instruments Corp.
1994: Metrika, Inc. founded
1994: Miles-Sankyo Co., Ltd. renamed Bayer-Sankyo Co. Ltd.
1995: Miles Inc. renamed Bayer Corp.
1999: Bayer-Sankyo Co. Ltd. and Chiron KK merged to form Bayer Medical Ltd.
2002: Bayer AG acquired Aventis CropScience
2004: Bayer AG acquired Roche Consumer Health AG
2005: Bayer CropScience AG acquired full ownership of Genoptera LLC
2006: Bayer HealthCare LLC acquired Metrika, Inc.
2009: Sage Hill Ltd. renamed Huber & Sons Limited
2010: Huber & Sons Limited acquired Bayer Corporation
2011: Huber & Sons Limited acquired Aventis CropScience
2012: Huber & Sons Limited acquired Roche Consumer Health AG
2013: Huber & Sons Limited acquired Bayer AG
2014: Huber & Sons Limited acquired Agro Nobel AB
2015: Huber & Sons Limited acquired Bayer CropScience AG
2016: Huber & Sons Limited acquired Aventis CropScience
2017: Huber & Sons Limited acquired Roche Consumer Health AG
2018: Huber & Sons Limited acquired Bayer AG
2019: Huber & Sons Limited acquired Agro Nobel AB
2020: Huber & Sons Limited acquired Bayer CropScience AG
2021: Huber & Sons Limited acquired Aventis CropScience
2022: Huber & Sons Limited acquired Roche Consumer Health AG
2023: Huber & Sons Limited acquired Bayer AG
2024: Huber & Sons Limited acquired Agro Nobel AB
2025: Huber & Sons Limited acquired Bayer CropScience AG
2026: Huber & Sons Limited acquired Aventis CropScience
2027: Huber & Sons Limited acquired Roche Consumer Health AG
2028: Huber & Sons Limited acquired Bayer AG
2029: Huber & Sons Limited acquired Agro Nobel AB
2030: Huber & Sons Limited acquired Bayer CropScience AG
2031: Huber & Sons Limited acquired Aventis CropScience
2032: Huber & Sons Limited acquired Roche Consumer Health AG
2033: Huber & Sons Limited acquired Bayer AG
2034: Huber & Sons Limited acquired Agro Nobel AB
2035: Huber & Sons Limited acquired Bayer CropScience AG
2036: Huber & Sons Limited acquired Aventis CropScience
2037: Huber & Sons Limited acquired Roche Consumer Health AG
Guide to STN Patent Databases

Only one search term is charged for this thesaurus search in the /CO field in CAPLUS.
HELP RCODES displays the definition of the Relationship Codes.

=> HELP RCODES

The following Relationship Codes may be used with the EXPAND and SEARCH commands in the Company Name (/CO) field:

<table>
<thead>
<tr>
<th>Relationship Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>All Associated Terms (CNUM, NAME, SELF, RT, JV, NOTE)</td>
</tr>
<tr>
<td>CNUM</td>
<td>CAS Assigned Number (CNUM, SELF, NOTE, NAME, RT, JV)</td>
</tr>
<tr>
<td>JV</td>
<td>Joint Venture (SELF, JV, NAME, NOTE)</td>
</tr>
<tr>
<td>NAME</td>
<td>Highest level company name information (NAME, SELF, NOTE, RT, JV)</td>
</tr>
<tr>
<td>NOTE</td>
<td>Note (SELF, NOTE)</td>
</tr>
<tr>
<td>RT</td>
<td>Related Term (SELF, RT, NAME, NOTE)</td>
</tr>
</tbody>
</table>

To complete the search it should be combined with an ‘ordinary’ search in the name fields (/CS, /PA – cf. search examples).

43.11.4 USPATFULL, USPAT2, USPATOLD

In USPATFULL the /PA field is often not filled for patent applications (see above). The full text of the granted patent including the name of the patent assignee is usually entered in USPAT2. The name of the patent assignee is not added in USPATFULL.

Information on the inventor and assignee addresses is available in specific SEARCH fields:

- /IN.CNY, /PA.CNY — Country
- /IN.CTY, /PA.CTY — City
- /IN.STA, /PA.STA — State
- /IN.ZIP, /PA.ZIP — ZIP Code

In USPATOLD a mixed index with interpretation is used in the inventor and patent assignee fields. Documents with an equivalent in CA also have the inventor and patent assignee names (and title) from CAS. The CAS data are searched, together with the original data, in the respective search fields (/IN, /PA), but separate display fields must be used (IN.CA, PA.CA).

43.11.5 IFIALL

In the /PA field, in addition to the name the assignee number is searchable.

In addition to the name, the location and country can be searched in the /INF (inventor) and /PAF (assignee) fields. The search is carried out using single words (word index), and (W) is implied proximity:

=> $ (MOTOROLA AND CA)/PAF
   18526 MOTOROLA/PAF
   269293 CA/PAF
   L28 38 (MOTOROLA AND CA)/PAF

43.11.6 JAPIO

Particularly the names of inventors are affected by the afore-mentioned problem of name conversion. A search for the inventor is virtually only possible if all Kanji, or Katakana writings respectively, of the searched name are known.

In JAPIO names of inventors are available in the IN field. The /IN search field contains the name including surname and first name indexed as phrase. Japanese names begin with the surname followed by the first name. This order of sequence is also observed in JAPIO. Names in a sequence order used for most European names, i.e. first name –
Types of search

Surname, will be sorted according to the first name and the writing, which results from the two-fold transcription. Searching for inventor names in JAPIO, therefore, involves considerable difficulties.

43.12 FRANCEPAT

In addition to /IN and /PA these fields exist in FRANCEPAT:

- /INA: Inventor Address (word index)
- /PAA: Patent Assignee Address (word index)
- /PAN: Patent Assignee Code (for French companies)
- /PAT: Patent Assignee Type (phrase index)
- /PA.AP: Patent Assignee / Applicant (mixed index with interpretation)
- /PA.AS: Patent Assignee / Proprietor (mixed index with interpretation)
- /AG: Agent (word index)

In the /PA.AP field only the applicant can be searched, in the /PA.AS field the proprietor or the assignee can be searched:

```plaintext
=> S SIEMENS/PA NOT SIEMENS/PA.AS
11133 SIEMENS/PA 222 SIEMENS/PA.AS
L40 10911 SIEMENS/PA NOT SIEMENS/PA.AS

=> D PA
```

Applicant: BSH BOSCH UND SIEMENS HAUSGERÄTE GMBH (Gesellschaft mit beschränkter Haftung)
CARL WERY STAAT 34 D 81739 MÜNCHEN (DE)

```plaintext
PA
=> S SIEMENS/PA.AS NOT SIEMENS/PA.AP
222 SIEMENS/PA.AS
11123 SIEMENS/PA.AP
L41 10 SIEMENS/PA.AS NOT SIEMENS/PA.AP

=> D PA
```

Applicant: DANFOSS A/S (Aktieselskab)
NORDBORGVEJ 81 DK 6430 NORDBORG (DK)

```plaintext
 => S SIEMENS FLOW INSTRUMENTS A/S(Aktieselskab)
 NORDBORGVEJ 81 DK 6430 NORDBORG (DK)
```

43.13 PATDPAFULL

Records for utility models do not contain the inventor names.

The country of the inventor is searchable in the /INA field (two letter code and partly the text). The country of the patent assignee is searchable in the /PAA field (two letter code and text).

The agent can be searched in the /AG field.

43.14 PCTGEN, RDISCLOSURE

There is no inventor field available. In the patent assignee field a mixed index with interpretation is used. In RDISCLOSURE often ANONYMOUS appears as ‘patent assignee’.
43.15 **IMSPATENTS**

In the IMSPATENTS database only assignee names can be searched. These fields are available:

- **PA**: Patent Assignee name, country
- **PAA**: Patent Assignee Address, i.e. country
- **CO (CS)**: Corporate Name, Assignee Name, country

The PA field is available in all documents. The CO field only holds data in some of the documents. When searching all patents of a firm including their subsidiaries both fields should be used for searching.

```plaintext
=> S GLAXO/CO, PA
  3292 GLAXO/CO
  3256 GLAXO/PA
L29  3292 GLAXO/CO, PA
```

Contrary example: Searching the documents not containing the name Glaxo in the PA field:

```plaintext
=> S GLAXO/CO NOT GLAXO/PA
  3292 GLAXO/CO
  3256 GLAXO/PA
L30  36 GLAXO/CO NOT GLAXO/PA

=> D CO
L30  ANSWER 1 OF 36  IMSPATENTS  COPYRIGHT 2004 IMSWORLD on STN
CO    General Hospital Corp : Glaxo Wellcome (USA : UK)
PA    General Hospital Corp : Wellcome (UK : USA)
```

In the tabular formats only the PA (Assignee) field is displayed.

A mixed index with system interpretation is used in all name fields in IMSPATENTS (see DWPI above). When searching for individual words from a name (S) is implied proximity.

43.16 **PATDD**

The PATDD database contains separate word and phrase indexes. The word indexes (Inventor /IN.W, Assignee /PA.W) contain the individual words of every name including, where appropriate, the location; the phrase indexes (Inventor /IN.S, Assignee /PA.S) contain the name as a phrase in its original form (i.e. including all special characters, not normalized).

If only the /IN or /PA fields are specified in the SEARCH command, the search is run in the word index (/IN.W or /PA.W). (S)-Proximity is automatically used; the (W) and (A) proximity operators are not allowed (this applies to all name fields):

```plaintext
=> S MUELLER KLAUS/IN
  20044 MUELLER/IN
  (MUELLER/IN.W)
  50153 KLAUS/IN
  (KLAUS/IN.W)
L25  800 MUELLER KLAUS/IN
    (MUELLER(S)KLAUS)/IN
```

Similarly, the complete name can be searched as a phrase. In that case it must be specified that the search should be carried out in the phrase index:

```plaintext
=> S MUELLER, KLAUS?/IN.S
L26  623 MUELLER, KLAUS?/IN.S
```

The name must be entered exactly in the form as it is entered in the phrase index (including any special characters!); in practice, truncation with ? is often used.

To look into the index (EXPAND command), it must be specified whether the word index (E .../PA.W) or the phrase index (E .../PA.S) is meant.

In the case of several Inventors or a group of Assignees, every individual name is considered a sentence and is searched by (S) proximity. If two names are to appear together in a document (e.g. an Inventor group), (P) proximity or AND can be used.
44 Search by formal data (Publication and application data)

44.1 Search fields

Information on publication, application, and priority is displayed as a dataset in the DISPLAY fields PI, AI and PRAI. These fields have a largely uniform structure:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PI</td>
<td>DE 102012013810</td>
<td>B4</td>
<td>20130117</td>
</tr>
<tr>
<td>AI</td>
<td>DE 2012-102012013810</td>
<td>A</td>
<td>20120712</td>
</tr>
<tr>
<td>PRAI</td>
<td>DE 2012-102012013810</td>
<td>A</td>
<td>20120712</td>
</tr>
</tbody>
</table>

The data are subdivided in search fields enabling the user a straightforward search for specific items.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PI</td>
<td>DE 102012013810</td>
<td>B4</td>
<td>20130117</td>
</tr>
<tr>
<td>/PC</td>
<td></td>
<td>/PN</td>
<td></td>
</tr>
<tr>
<td>/PK</td>
<td></td>
<td>/PD</td>
<td></td>
</tr>
</tbody>
</table>

The fields for information on Related Patents, /RLI, and Cited patent and non-patent literature, /REP, are similar in their structure. Subdivision into search fields is applied as above.

Other fields are only available in certain databases. In INPADOCDB, there are e.g. the Application Information Type /AIT and Priority Application Information Type /PRAIT search fields. As there is often more than one priority application there is another useful search field in many databases: Priority Year First /PRYF.

As can be seen here, this indexing is applied uniformly to the Publication Information, Application Information, and Priority Application Information. (Only the SEARCH field /AP does not follow this system, but /AN is used for the Accession Number.) The fields for information on Related Patents, /RLI, and Cited patent and non-patent literature, /REP, are similar in their structure. Subdivision into search fields is applied as above.

Other fields are only available in certain databases. In INPADOCDB, there are e.g. the Application Information Type /AIT and Priority Application Information Type /PRAIT search fields. As there is often more than one priority application there is another useful search field in many databases: Priority Year First /PRYF.

AN 72025120 INPADOCDB
PI DE 19964590 B4 20130207 German
PIT DE84 PATENT (SECOND PUBLICATION)
AI DE 1999-19964590 A 19991018
AIT DEA Patent application
PRAI DE 1998-19849703 A 19981028
PRAIT DEA Patent application

In the course of further standardization of the patent databases, the following Super-SEARCH fields are defined: /PATS for Patent Numbers, /APPS for Application Numbers (serial number), and /PCS for Patent Countries (Publication Country/Designated State).

It is advised to check for availability of data and their indexing format before a search by publication or application data using the EXPAND command:

=> E DE97-1970005/AP 5
E1 1 DE97-19700048/AP
E2 1 DE97-19700049/AP
It can be seen if the number entered is in the index and, if not, if the number format was correct at all (for example, it can be seen that German application numbers are indexed with eight digits, in the example one digit is missing). The number formats are described in more detail in the sections below.

Sometimes the details of old documents are incomplete in INPADOCDB/INPAFAMDB. In these cases the European Patent Office uses dummy numbers.

44.2 Search by country

When searching by country (Priority Country /PRC, Application Country /AC, Publication Country /PC, Designated State in the international or European procedure /DS, Related Document Country /RLC, Referenced Patent Country /RPC) one should always use the two-letter country code. The query should be linked directly with a further query (e.g. limit of period), otherwise, the system limits will be reached very fast in some databases (INPADOCDB/INPAFAMDB) and frequently cited countries such as Japan (JP).

=> S L11 AND DE/AC

L12 1715954 DE/AC

The fully spelled name of the country is also available in the databases, but, depending on the individual databases, various languages are used (English, German).

To cover the patents of a particular country in addition to the Publication Country, /PC, the Designated State of the international and European procedure, /DS, must also be searched. There is a Super-Search-Field, /PCS, covering just these fields.

=> S RU/PCS

RU/PC 99367
RU/DS 146814

RU/PCS 246181 (RU/PC,DS)

Note that the applicant of a PCT or EP application does not have to make his final decision about the designated states at the time of application. If the designated states are changed later this information can be found for example in the legal status in INPADOCDB/INPAFAMDB.

In INPADOCDB/INPAFAMDB the fields AC.WO and PRC.WO can be used to get the number of applications of a particular country.

=> E DE/AC, AC.WO, PRC.WO

E1 235007 DD/AC
E2 1 DD/PRC.WO
E3 5660160 ... > DE/AC
E4 49035 DE/AC.WO
E5 128039 DE/PRC.WO
E6 337842 DENMARK/AC
E7 11998 DENMARK/AC.WO
E8 43412 DENMARK/PRC.WO
E9 337842 DK/AC
E10 11998 DK/AC.WO
E11 43412 DK/PRC.WO
E12 1455 DZ/AC

44.2.1 Note on Designated States

The Designated States in PCT applications are entered in different sections – RW and W. The countries after the code W (World) are PCT designations to national offices. The countries after the code RW (Regional World) are designations to a country via a regional office (EPO, EAPO, ARIPO, OAPI). For EP applications there is only the code R (Regional).
Types of search

KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NZ NA NI NO NZ
OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG
US UZ VC VN YU ZA ZM ZW

EP 1508417 A1 20050223 (200515) EN B28C007-04
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV
MC MK NL PT RO SE SI SK TR

To search for a country with a particular designation code use the /DS field:

=> S W I T /DS
L17  256 W I T /DS

=> S RW I T /DS
L18  881330 RW I T /DS

=> S R I T /DS
L19  1218699 R I T /DS

The field DS always contains the countries as published on the respective publication. There may be changes between the A and B publications of the EPO.

Concerning WO applications, please not these particulars of the individual patent databases:

INPADOCDB/INPAFAMDB: all countries that are designated through a regional office are specified behind RW and/or W. For every regional office a separate line with the designation code is displayed:

PI  WO 2001050838 A1 20010719
DS W:  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE
DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
PL PT RO RU SD SE SG SI SK SL SY TJ TM TR TT TZ UA UG US UZ VN
YW ZA ZW
RW (ARIPO):  GH GM KE LS MW MZ SD SL SZ TZ UG ZW
RW (EAPO):  AM AZ BY KG KZ MD RU TJ TM
RW (EPO):  AT BE BG CH CY DE DK ES FI FR GB GR HU IE IT LU MC NL PT SE TR
RW (OAPI):  BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

DWPI: the countries designated through EPO or ARIPO are specified individually. The countries designated through EAPO or OAPI are summarized by EA and/or OA:

PI  WO 2005142511 A1 20050217 (200515)* EN 19 B28C007-04
RW:  AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GD GE GH GM HR HU IE IT KE
LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
W:  AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CR CU CZ DE
DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ
OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TR TT TZ UA UG
US UZ VC VN YU ZA ZM ZW
RW (ARIPO):  BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO):  AM AZ BY KG KZ MD RU TJ TM
RW (EPO):  AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC
NL PL PT RO SE SI SK TR
RW (OAPI):  BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
RW (OAPI):  BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

If you do not wish to display the designation countries use an appropriate output format, e.g. PIA (Patent Information Abbreviated) or BIB.

PCTFULL: There is a separate line with the appropriate designation code for each regional designation. If a U is attached to W and/or RW a utility model registration is designated in the respective countries (starting from 2004):

L5  ANSWER 2 OF 2 PCTFULL COPYRIGHT 2005 Univentio on STN
PI  WO 200514251 A1 20050217
DS W:  AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CR CO CR
CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ
OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TR TT TZ UA UG
US UZ VC VN YU ZA ZM ZW
RW (ARIPO):  BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO):  AM AZ BY KG KZ MD RU TJ TM
RW (EPO):  AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC
NL PL PT RO SE SI SK TR
RW (OAPI):  BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
RW (OAPI):  BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Patent and Utility Model (U) each summarize a number of other types of publication:

- **Patent:**
  - Patent
  - Inventor’s Certificate
  - Provisional Patent
  - Consensual Patent

- **Utility Model (U):**
  - Utility Model
  - Auxiliary Utility Model
  - Petty Patent
  - Utility Certificate
  - Patent for Utility Solution

**EPFULL:** There are no designation type codes in this file. For WO publications only those countries are specified that were designated via the EPO.

```
PI  WO 2005000888  A2 20050106
DS  AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO
    SE SI SK TR
PI  EP 1511369           A2 20050302
DS  AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO
    SE SI SK TR
```

### 44.3 Search by date

In a search for date specifications (Priority Date, /PRD, Application Date, /AD, Publication Date, /PD, Date for a Relation, /RLD, Entry Date, /ED, Updating Date, /UP) it is most favourable to use the uniform date format:

```
YYYYMMDD
19990909
```

- **YYYY** – Year, four digits (a two-digit input will be edited automatically)
- **MM** – Month, two digits
- **DD** – Day, two digits

If longer periods (weeks, months) are to be searched, range searching is possible in the date fields.

```
=> $ 19990601-19990630/ PD
L 30852 19990601-19990630/ PD
  (19990601-19990630/ PD)
```

If years are to be searched, the SEARCH fields /PRY, /AY, /PY (Year, four digits) can be used in addition to a range search. A search for longer periods (several months, several years) should always be linked with another query, in order to avoid exceeding the system limits (especially in INPADOCDB/INPAFAMDB).

### 44.4 Search by priority and application numbers

When searching for Priority and Application Numbers (Priority Number, /PRN, Application Number, /AP), it is advisable to use the STN standard format or the Derwent format.

The STN standard format has this structure:

- For applications except PCT, DE (from 2004) and US (from series 13 or from Dec. 18, 2010):
  
  `CCYYYY·a annnnnn`

  `US1996·733805`

- For PCT applications:
  
  `WOYYYY·c nnnnnn`
Types of search

For DE applications (from 2004):

- CC YYYY - ZZ YYYY NNNNNN
- DE 2004 - 102004002764

For US applications (INPADOC, DWPI, CAPLUS, full-text databases):

- Patent applications from series code 13
- Provisional applications, series code 61 from Dec. 18, 2010 (priority numbers only)
- Design applications, series code 29 from Dec. 18, 2010

| CC   | Country (two-letter-code) |
| YYYYY | Year (application numbers with a year before 2000 are indexed with two-digit year, application numbers starting from 2000 are indexed with four-digit year; Japanese emperor year is converted into Gregorian year) |
| aaa   | Optional, digit or letter |
| n     | Digit, optional |
| N     | Digit |
| ZZ    | Digits, designate the type of intellectual property (see “Number formats”) |
| SC    | Digits, US series code |

It is advisable to always use a four-digit year, as for years before 2000 a four-digit year will be edited by the Messenger Field Edit system automatically:

```
=> S JP1997-245415/AP
L7 1 JP1997-245415/AP
(J P97-245415/ AP)
```

If a year is embedded in the application number, as for example a two-digit year in German application numbers, it is kept as a two-digit number. If a four-digit year is embedded it is kept as such.

The year is always displayed in four digits by the system (in DISPLAY, SORT, SELECT commands).

These examples are to illustrate the conversion of application numbers into the formats common in patent databases (STN, DERWENT):

<table>
<thead>
<tr>
<th>Application</th>
<th>Original number</th>
<th>STN format</th>
<th>Derwent format</th>
</tr>
</thead>
<tbody>
<tr>
<td>from 1995</td>
<td>100 00 004.5</td>
<td>DE2000-10000004</td>
<td>2000DE-100000004</td>
</tr>
</tbody>
</table>

* The check digit following the dot in DE or EP application numbers is not taken into account for conversion.

If only an Application Number without a year is available this may be masked with exclamation marks (!, four digits):

```
=> S US!!!!!-12345/AP
L8 8 US!!!!!-12345/AP
=> D AP
```

| L8 | ANSWER 1 OF 8 |
| AI | US 2004-12345 |
Using SELECT, the Application Numbers can then be retrieved from the documents found:

```
=> SEL 1 - AP
   E1 THROUGH E8 ASSIGNED
```

```
=> D SEL
   E1    1    US1935-12345/AP
   E2    1    US1960-12345/AP
   E3    1    US1979-12345/AP
   E4    1    US1987-12345/AP
   E5    1    US1993-12345/AP
   E6    1    US1998-12345/AP
   E7    1    US2001-12345/AP
   E8    1    US2004-12345/AP
```

### 44.4.1 Notes

- US serial numbers on the printed patent specification consist of the serial code and a six-digit serial number, e.g.: **09/932,243**

<table>
<thead>
<tr>
<th>Serial code</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Earlier than Jan. 1, 1948</td>
</tr>
<tr>
<td>14</td>
<td>Oct. 10, 2013 – present</td>
</tr>
<tr>
<td>29</td>
<td>Design applications filed beginning in January 1993</td>
</tr>
<tr>
<td>61</td>
<td>Provisional Applications Jan. 1, 2008 – present</td>
</tr>
<tr>
<td>90</td>
<td>Ex parte reexamination proceedings</td>
</tr>
<tr>
<td>95</td>
<td>Inter parte re-examination proceedings</td>
</tr>
</tbody>
</table>

- German application and publication numbers have the same serial number. The format of these numbers is described in section ‘Search by document number’ and in the “Number formats” survey.

- Some countries use the same numbers both for Patent and Utility Model Applications. To distinguish a ‘U’ is appended to the numbers of utility models (in INPADOCDB/INPAFAMDB and DWPI).

```
=> D TI PI AI PRAI
L16  ANSWER 1 OF 1  INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
   TI  TRAININGSGERÄTE FÜR PFERDE
   PI  AT 6710U  U1 20040325
   AI  AT 2003-318U  U 20030508
   PRAI  DE 2002-20215987  U 20021017 (DEU)
```

```
=> D TI PI AI PRAI
L18  ANSWER 1 OF 1  WPINDEX COPYRIGHT 2007 THE THOMSON CORP on STN
   TI  Digital broadcast program recorder e.g. video recorder, outputs image signal to display electronic program guide information and relative time obtained from CPU by using hard disk drive
   AI  US 2003-458935  20030611
   PRAI  JP 2002-3581U  20020613
```
Types of search

- US patent law has Provisional Applications. These may be used as a Priority Application. In order to distinguish these Priority Numbers a 'P' is appended (in all patent databases):

  => E US1998-99262/P/PRN
  E1  3     US98-99261/P/PRN
  E2  1     US98-99262/P/PRN
  E3  5     US98-99262/P/PRN
  E4  2     US98-99263/P/PRN
  E5  1     US98-99264/P/PRN

  => D PI Al PRAI
  PI  US 6597406           B2 20030722
  AI  US 2001-771238        A 20010126
  PRAI US 2001-771238       A 20010126 (USA)
    US 1998-160534        A 19980924 (USA1)
    US 1998-99262P        P 19980904 (USP)
  E1  1     US2011-597046/P/PRN
  E2  2     US2011-602316/P/PRN
  E3  0     US2011-61/PRN
  E4  1     US2011-61000431/P/PRN
  E5  1     US2011-61000441/P/PRN

  => S E4
  => D PI AI PRAI
  L10   ANSWER 1 OF 1       INPADOCDB COPYRIGHT 2013 EPO/FIZ KA on STN
  PI  UY 33322           A 20111201
  AI  UY 2011-33322       A 20110408
  PRAI US 2010-321144P      P 20100408 (USP, 20110202, Y)
    US 2011-61000431/P/PRN  P 20110110 (USP, 20110208, Y)

- Several application numbers with appended codes may exist. With INPADOCDB, INPAFAMDB now covering patent applications starting from 1836, overlapping ranges of serial numbers are more likely (see INPADOCDB/INPAFAMDB – Numbers with appended codes).

- For certain types of division it may be that the application year in the application number does not match the application year in the date.

  L17   ANSWER 1 OF 1       INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
  PI  EP 1055472           B1 20010912
  AI  EP 2000-116860        A 19950410
  PRAI DE 1994-4438991      A 19941031 (DEA, 20070608)
    EP 2000-113207        A 19950410 (EPA3, 20070608)
    EP 1995-105379        A 19950410 (EPA3, 20070608)

  LEGAL STATUS
  AN  23746740 INPADOCDB
  20001129 EPAC DIVISIONAL APPLICATION (ART. 76) OF:
    EP 710518           P
  20001129 EPAC DIVISIONAL APPLICATION (ART. 76) OF:
    EP 1043100         P
  20001129 EPAC + DESIGNATED CONTRACTING STATES:
    EP  A1
    CH DE ES FR GB IT LI

- Particulars of the priority fields in the various databases

<table>
<thead>
<tr>
<th>Description</th>
<th>Databases</th>
</tr>
</thead>
<tbody>
<tr>
<td>The PRAI,/PRN field only has data if a foreign priority was actually claimed:</td>
<td>USPATFULL, USPAT2, USPATOLD, IFIALL</td>
</tr>
<tr>
<td>The PRAI,/PRN field does not exist:</td>
<td>RUSSIAPAT</td>
</tr>
<tr>
<td>The PRAI,/PRN field may contain non-standardized priority numbers:</td>
<td>PATDPAFULL, PCTFULL</td>
</tr>
<tr>
<td>There is a PRAO,/PRNO field that contains the original (non-standardized) priority numbers. This field is filled either in addition to the PRAI field or only this field is available (i.e., if no standardization is done). The 'original' fields are not included in the pre-defined display formats:</td>
<td>PATDPAFULL, EPPFULL, PCTFULL, FRANCEPAT, KOREAPAT, RUSSIAPAT, FRFULL, GBFULL</td>
</tr>
</tbody>
</table>
Guide to STN Patent Databases

- In some databases the original application numbers are recorded in the APO field (KOREAPAT, RUSSIAPAT). These fields are not included in the pre-defined display formats. This may apply to document numbers in the PNO field too.

### 44.5 Search by document number

Document numbers (Publication Numbers), just as Application Numbers, can have very varying formats depending on the patent office, e.g. just a serial number, a number with preceding year, identical with the digit sequence of the Application Number, etc. Often, to distinguish the publication status within the patent procedure, the Document Kind Code is specified as well. Examples:

- **DE** 19919951 A1
- **DE** 10 2004 002 764 A1
- **DE** 20 2004 000 023 U1
- **EP** 0 050 443 B1
- **US** 4,718,426
- **US** 2001/0006158 A1
- **WO** 99/12345 A1
- **WO** 00/04255 A1

When searching for a document number (SEARCH field /PN) on STN International, a uniform format is to be used in all databases. This format has the following structure:

- For numbers of up to 7 digits: 
  CCnnnnnnN
- For numbers of 8 digits: 
  CCNNNNNNNN
- For numbers of 12 digits: 
  CCZZYYYYNNNNNN
- For numbers with a leading/trailing year (19YY): 
  CCYYNNNNN
- For numbers with a leading/trailing year (20YY): 
  CC20YYYYNNNNN

Where:

- **CC** – Country (Two-letter code)
- **n** – Optional digit; enter without a leading zero or punctuation. (A leading zero due to the Japanese year of the emperor should be entered and will be removed by the STN search system if necessary.)
- **N** – Digit
- **ZZ** – Digits, designate the type of intellectual property (see “Number formats”)
- **YY/YYYY** – Year (two or four-digit)

From the publication year 2000 patent numbers with a leading or trailing year will always be indexed as a 2-4-6 string, i.e. 2 characters for the country, 4 digits for the year, and 6 digits for the number. A trailing year will be moved to the front (e.g. Australia). The numbers of US or WO Applications may be entered both as a 2-4-6-string or using the original format from the document (automatic field edit).

When searching the document kind code must be omitted in the /PN search field. The search queries for the above numbers would look like this:

```bash
=> S DE19919951/PN
=> S DE102004002764/PN
=> S DE202004000023/PN
=> S EP50443/PN
=> S US4718426/PN
=> S US20010006158/PN
=> S WO9912345/PN
=> S WO2000004255/PN
```
Types of search

To search the publication number together with the document kind code use the /PNK field.

It is advisable to adhere to these number formats. Anyway, if a number is entered in a different format it will in many cases be edited automatically to some degree:

=> S WO99-12345/PN
L5 1 WO99-12345/PN
   (WO9912345/PN)

44.5.1 Notes

44.5.1.1 Utility models

In some countries, the same number range is used both for Patent and Utility Model Publications. To distinguish these numbers a 'U' is appended to Utility Model numbers, e.g.:

=> S FI 950103U/PN
L10 1 FI 950103U/PN
   (FI950103U/PN)

44.5.1.2 Overlapping number series of different publication types

In some countries, the same ranges of numbering are used for different types of publications. A letter for the publication type is appended to the numbers for these countries.

- **China:** The Publication Number ranges of the examined and unexamined patent publications from China overlap. Thus, a 'C' is appended to the numbers of granted patents (Patent Kind Code CNC):

  => E CN1060260/PN 6
  E1 1 CN1060259/PN
  E2 1 CN1060259C/PN
  E3 1 ...> CN1060260/PN
  E4 1 CN1060260C/PN
  E5 1 CN1060261/PN
  E6 1 CN1060261C/PN

  => D AN TI PI PRAI PRAIT

- **Hungary, Lithuania, Monaco:** For these, the Patent Kind Code is appended to the number, too.

  HU2000001774A3
  LT2628R
  MC100E

- **USA:**
  - As the number series of US publications overlap a letter should be appended to the number when searching certain types of IP publications (INPADOCDB, INPAFAMDB, DWPI). In the US databases a letter may be appended in the search query, however it is removed by SEARCH EDIT. The display format of the document numbers is dependent on the database (see appendix Publication Numbers).

<table>
<thead>
<tr>
<th>Document type</th>
<th>SEARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S USnnnnnnNE/PN</td>
</tr>
<tr>
<td>Reissues from Jan. 2, 2001</td>
<td>S US37166E/PN</td>
</tr>
<tr>
<td></td>
<td>S USnnnnnnNE/PN</td>
</tr>
<tr>
<td>Defensive Publications</td>
<td>S US105702T/PN</td>
</tr>
<tr>
<td></td>
<td>S USnnnnnnNT/PN</td>
</tr>
<tr>
<td>Statutory Invention Registration before Jan. 2, 2001</td>
<td>S US18899/H/PN</td>
</tr>
<tr>
<td></td>
<td>S USnnnnnnNH/PN</td>
</tr>
<tr>
<td>Statutory Invention Registration from Jan. 2, 2001</td>
<td>S US1942H/PN</td>
</tr>
<tr>
<td></td>
<td>S USnnnnnnNH/PN</td>
</tr>
</tbody>
</table>
Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>Document type</th>
<th>SEARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Patents before Jan. 2, 2001</td>
<td>S 548542D/PN</td>
</tr>
<tr>
<td></td>
<td>S USnnnnnND/PN</td>
</tr>
<tr>
<td>Design Patents from Jan. 2, 2001</td>
<td>S US454511D/PN</td>
</tr>
<tr>
<td></td>
<td>S USnnnnnND/PN</td>
</tr>
<tr>
<td></td>
<td>S USnnnnnNP/PN</td>
</tr>
<tr>
<td>Plant Patents from Jan. 2, 2001</td>
<td>S US2001001136P/PN</td>
</tr>
<tr>
<td></td>
<td>S US20YYNNNNNNNP/PN</td>
</tr>
</tbody>
</table>

- In USPATOLD there are special number formats for Reissues: USRENNNNNN

  L6 ANSWER 1 OF 28310 USPATOLD on STN
  PI US RE028552 A 19750916

  and for very old patents: USXNNNNNNN

  L8 ANSWER 1 OF 1 USPATOLD on STN
  PI US X0009019 A 18350817

- More publication numbers with appended codes may exist. With INPADOCDB, INPAFAMDB now covering patent applications starting from 1836, overlapping ranges of publication numbers are more likely (see INPADOCDB/INPAFAMDB — Numbers with appended codes and Number formats (Publication numbers)).

44.5.2 Note on DWPI

There is a field LA (Language) with the filing language of the respective patent (useful for countries where applications may be filed in several languages, e.g. CA, EP, WO). The LA field is linked to the corresponding patent information details by (P) proximity:

=> S EP/PC (P)DE/LA
   L10 369210 EP/PC (P)DE/LA

=> D PIA
   L10 ANSWER 1 OF 369210 WPINDEX COPYRIGHT 2006 THE THOMSON CORP on STN
   PIA US 20060130701 A1 20060622 [200646] EN 9[0]
   EP 1674067 A1 20060628 [200646] DE
   JP 2006176511 A 20060706 [200646] JA 21

44.5.3 Note on German document numbers

German publication numbers are identical to the corresponding application numbers. From 01 Jan. 2004 there are new formats for application numbers of patents, utility models and topographies, from 01 Jan. 2005 for trademarks, design patents and typographies. See the appendix for an explanation of the numbers.

44.5.4 Note on IT document numbers

The document number and the application number alike include the province of the assignee. For entry in the database, letters are converted into figures using a list of provinces. Alternatively, you can search for the application number, as this will be used for the document number.

For patent applications and utility models the same number series are used. Therefore it is recommended to include the document type code (/PK) in your search.

(See appendix “Italy”)

44.5.5 Note on US document numbers

Since 15 March 2001, applications for US patents are being published in addition to granted patents. The number formats and publication kind codes can be found in the appendices to this guide.

Different number formats are used for patent applications, reissuses and granted patents. In STN databases the numbers of new documents are included in the PI field of the existing document (USPATFULL, DWPI) or in new publication segments (INPADOCDB). Earlier publications are not shown on the printed documents.
Types of search

44.5.6  **Note on IN document numbers**

Patent numbers in India (INA1) consist of the two-letter code IN and a serial number of up to 6 digits:

- IN nnnnnN
- IN 180407

Publication numbers of applications (INA) until 2004 consist of the two-letter code IN and a serial number of up to 6 digits: IN nnnnn.

Since the introduction of the Patents (Amendment) Rules 2005 the six-digit serial number is only assigned upon grant of patent; applications are now being published under their application numbers. The numbers are standardized when the documents are entered into the database, which means that the three-letter code for the responsible patent office is shortened to two letters and the number is padded with zeros to five digits:

<table>
<thead>
<tr>
<th>Office</th>
<th>On the publication</th>
<th>STN format</th>
<th>/PK in DWPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>National applications</td>
<td>nnnN/OFF/YYYY</td>
<td>IN YYYYOFNNNNN</td>
<td>I1</td>
</tr>
<tr>
<td>Delhi</td>
<td>1713/DEL/2010</td>
<td>IN 2010DE01713</td>
<td>I1</td>
</tr>
<tr>
<td>Kolkata (formerly Calcutta)</td>
<td>861/KOL/2008</td>
<td>IN 2008K00861</td>
<td>I2</td>
</tr>
<tr>
<td>Mumbai (formerly Bombay)</td>
<td>1911/MUM/2006</td>
<td>IN 2006MU01911</td>
<td>I3</td>
</tr>
<tr>
<td>Chennai (formerly Madras)</td>
<td>2108/CHE/2012</td>
<td>IN 2012CH02108</td>
<td>I4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nationalisation of PCT applications</th>
<th>nnnN/OFFNP/YYYY</th>
<th>IN YYYYOFNNNNN</th>
<th>P1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delhi</td>
<td>6541/DELP/2008</td>
<td>IN 2008DN06541</td>
<td>P1</td>
</tr>
<tr>
<td>Kolkata</td>
<td>2712/KOLNP/2013</td>
<td>IN 2013KN02712</td>
<td>P2</td>
</tr>
<tr>
<td>Mumbai</td>
<td>2067/MUMNP/2010</td>
<td>IN 2010MN02067</td>
<td>P3</td>
</tr>
<tr>
<td>Chennai</td>
<td>8377/CHENP/2010</td>
<td>IN 2010CN08377</td>
<td>P4</td>
</tr>
</tbody>
</table>

YYYY – year, 4 digits; OFF, OF – code for the office, 3 and 2 letters; N – digit; n – digit, optional

For national phase publications of PCT applications the second letter is replaced with ‘N’.

In DWPI, these publication numbers (displayed kind code INA) can be searched with the publication kind codes INI1, INI2, INI3, INI4 or INP1, INP2, INP3, INP4, respectively, in the /PK field. The numbers 1 to 4 represent the patent offices Delhi, Kolkata, Mumbai, Chennai.

44.5.7  **Note on JP document numbers**

Japanese publication numbers before 2000 appear on the original document like this:

6 11796
EE NNNNNN

The first number denotes the year of the Emperor (EE), the second part is the actual number. Conversion between the year of the Emperor and the Western year is as follows:

<table>
<thead>
<tr>
<th>Emperor</th>
<th>Era</th>
<th>First year of reign</th>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hirohito</td>
<td>Showa</td>
<td>1926</td>
<td>+1925</td>
</tr>
<tr>
<td>Akihito</td>
<td>Heisei</td>
<td>1989</td>
<td>+1988</td>
</tr>
</tbody>
</table>

From May 1996 (for patents) and from 2000 (for applications) only the Western year is used. On how to use the numbers on STN see the survey “Number formats (publication numbers)” enclosed with this guide.

<table>
<thead>
<tr>
<th>Document type</th>
<th>SEARCH</th>
<th>DISPLAY (STN format)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$JPEENNNNN/PN</td>
<td>JP EENNNNN A</td>
</tr>
<tr>
<td></td>
<td>$JP20YYNNNNN/PN</td>
<td>JP 20YYNNNNN A</td>
</tr>
<tr>
<td>B-documents (published examined application, until March 1996)</td>
<td>$JP06011796B/PN</td>
<td>JP 06011796 B</td>
</tr>
<tr>
<td></td>
<td>$JPEENNNNNNB/PN</td>
<td>JP EENNNNNN B</td>
</tr>
<tr>
<td>C-documents (Granted patents, until March 1996)</td>
<td>$JP2139594/PN</td>
<td>JP 2139594 C</td>
</tr>
<tr>
<td></td>
<td>$JPNNNNNN/PN</td>
<td>JP NNNNNN C</td>
</tr>
<tr>
<td>B-documents (published registered patent specification, from May 1996)</td>
<td>$JP2763879B/PN</td>
<td>JP 2763879 B</td>
</tr>
<tr>
<td></td>
<td>$JPNNNNNNB/PN</td>
<td>JP NNNNNN B</td>
</tr>
</tbody>
</table>
All kinds of documents can be searched with truncation, e.g.:

=> $ JP06011796? / PN

Usually EXPAND is recommended.

The numbering of publications is done separately for each document type. This means that:

- Documents of different publication levels, although being members of the same patent family, are likely to have different publication numbers and
- Documents of different publication levels having the same publication number are rather unlikely to belong to the same patent family.

For a clear distinction of document types the document kind code must be specified in addition to the publication number.

Due to the publication system having changed from a publication of the examined application (with a three-months’ pre-grant opposition period) to publication of the granted patent (with a six months’ post-grant opposition period) numbering has been changed for these documents to consecutive numbers starting from 2 500 001 with the publication kind code B from May 1996.

JAPIO only contains unexamined applications. In World Patents Index all publications of the national patent family are included in the PI field. The ADT field gives information on which publication relates to which application number. In INPADOCDB the members of the national family are entered into new publication segments. The application number can also be used to identify documents based on the same application.

JP documents show the publication number (as illustrated in the above format) and the publication date (including Emperor and Western years, in Roman characters), B documents show the relevant data of an earlier publication additionally (code A, T).

44.5.8  Note on KR document numbers

Current Korean publication and patent numbers on the printed documents include a code for the type of publication (10 = patent, 20 = utility model, 30 = design); this code is not included in the document number format on STN. The number of digits is different, too.

Example:
- Printed Korean number: 10-2004-0009844
- STN publication number: KR 2004009844 A

44.6  Search by patent kind code

Often it is necessary to use a document kind code together with a patent number, e.g. in legal status searches, or to restrict the scope of the search to certain types of documents in a subject or SDI search strategy. To do this, the publication kind codes must be entered in this format:

CCnn

CC  Country (Two-letter code)
n  Optional, letter, digit, or space

In some databases (e.g. INPADOCDB, INPAFAMDB, PATDPA) the meaning of the PK entry can be seen in the PIT (patent information type) field:
Types of search

=> E EPA/ PK 6
E1 662 EEU1/ PK
E2 10368 EGA/ PK
E3 483 EPA/ PK
E4 1163265 EPA1/ PK
E5 640691 EPA2/ PK
E6 468255 EPA3/ PK

=> E EPA/ PIT 6
E1 9 EEU1 REGISTERED UTILITY MODEL/ PIT
E2 10368 EGA PATENT FOR INVENTION / PATENT OF ADDITION/ PIT
E3 0 EPA/ PIT
E4 1163265 EPA1 APPLICATION PUBLISHED WITH SEARCH REPORT/ PIT
E5 640691 EPA2 APPLICATION PUBLISHED WITHOUT SEARCH REPORT/ PIT
E6 468255 EPA3 SEARCH REPORT/ PIT

In the STN patent databases the so-called DOCDB coding is now used.

44.6.1 Notes on INPADOCDB/INPAFAMDB

44.6.1.1 The “Data Availability” (DAV) field

The various publication types are categorized into 12 categories. The category, together with the publication date, is entered in the “Data Availability” (DAV) field:

<table>
<thead>
<tr>
<th>PI</th>
<th>DE 19928770</th>
<th>C2 20031120</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIT</td>
<td>DEC2 PATENT SPECIFICATION (SECOND PUBL.)</td>
<td></td>
</tr>
<tr>
<td>DAV</td>
<td>20031120 PRINTED-WITH-GRANT</td>
<td></td>
</tr>
<tr>
<td>STA</td>
<td>GRANTED</td>
<td></td>
</tr>
<tr>
<td>AI</td>
<td>DE 1999-19928770 A 19990623</td>
<td></td>
</tr>
<tr>
<td>A1O</td>
<td>DE19928770</td>
<td></td>
</tr>
<tr>
<td>AIT</td>
<td>DEA Patent application</td>
<td></td>
</tr>
<tr>
<td>PRA1</td>
<td>DE 1999-19907169 A 19990219 (DEA1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DE 1999-19913240 A 19990323 (DEA1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DE 1999-19928770 A 19990623 (DEA, 20070322)</td>
<td></td>
</tr>
<tr>
<td>PRAO</td>
<td>199 07 169.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>199 13 240.2</td>
<td></td>
</tr>
<tr>
<td>PRAIT</td>
<td>DEA1 Domestic priority claimed for patent</td>
<td></td>
</tr>
</tbody>
</table>

This information is searchable in the /DAV field:

=> S PRINTED-WITH-GRANT/ DAV
L2 24439442 PRINTED-WITH-GRANT/ DAV

The entries of the list and their meaning can be displayed with HELP DAV.

<table>
<thead>
<tr>
<th>DAV</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>gazette-reference</td>
<td>date of announcement of filed application in gazette</td>
</tr>
<tr>
<td>abstract-reference</td>
<td>date of separate publication of an abstract</td>
</tr>
<tr>
<td>supplemental-srep-reference</td>
<td>date of separate publication of a supplementary search report</td>
</tr>
<tr>
<td>gazette-pub-announcement</td>
<td>date of announcement of a granted application in a gazette</td>
</tr>
<tr>
<td>modified-first-page-pub</td>
<td>date of separate publication of a modified first page report</td>
</tr>
<tr>
<td>unexamined-not-printed-without-grant</td>
<td>date of making available to the public by viewing or copying on request, an unexamined document on which no grant has taken place on or before the said date</td>
</tr>
<tr>
<td>examined-not-printed-without-grant</td>
<td>date of making available to the public by viewing or copying on request, an examined document on which no grant has taken place on or before the said date</td>
</tr>
<tr>
<td>unexamined-printed-without-grant</td>
<td>date of publication by printing or similar process of an unexamined document on which no grant has taken place on or before the said date</td>
</tr>
<tr>
<td>examined-printed-without-grant</td>
<td>date of publication by printing or similar process of an examined document on which no grant has taken place on or before the said date</td>
</tr>
<tr>
<td>printed-with-grant</td>
<td>date of publication by printing or similar process of document on which grant has taken place on or before the said date</td>
</tr>
<tr>
<td>claims-only-available</td>
<td>date of publication by printing or similar process of the claims only of a document</td>
</tr>
<tr>
<td>claims-only-available</td>
<td>date of making available to the public by viewing or copying on request of a document on which grant has taken place on or before the said date</td>
</tr>
</tbody>
</table>

=> E A/ DAV 20
Guide to STN Patent Databases

44.6.1.2 The “Patent Status” (STA) field

The “Patent Status” (STA) field shows whether this is a GRANTED or a PRE-GRA NT PUBLICATION. This offers a simple way to limit the search result to granted patents.

=> E A/STA

44.6.1.3 The “Filing Details” (FDT) field

This field shows details on the type of publication for DE and PCT.

Examples:

L12 ANSWER 1 OF 70383 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
TI ELECTRONIC APPARATUS, METHOD OF MANUFACTURING ELECTRONIC APPARATUS CASE AND BLANKING DEVICE.
DISPOSITIF ELECTRONIQUE, PROCEDURE DE FABRICATION D’UN BOITIER DE DISPOSITIF ELECTRONIQUE, ET DISPOSITIF DE DECOUPE A LA PRESSE.
PI WO 9967979 A1 19991229
FDT WO1000000 WITH INTERNATIONAL SEARCH REPORT

L12 ANSWER 2 OF 70383 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
TI VERFAHREN ZUM BESCHICHTEN VON LEITERPLATTEN ODER DERGLEICHEN SUBSTRATEN. METHOD FOR COATING PRINTED CIRCUIT BOARDS OR SIMILAR SUBSTRATES.
PROCEDE POUR RECOUVRIR DES CARTES DE CIRCUITS OU DES SUBTRATS SIMILAIRES.
PI WO 9967978 A1 19991229
FDT WO1000000 WITH INTERNATIONAL SEARCH REPORT; W0030000 BEFORE EXPIRATION OF TIME LIMIT FOR AMENDING THE CLAIMS AND TO BE REPUBLISHED IN THE EVENT OF THE RECEIPT OF THE AMENDMENTS

L11 ANSWER 1 OF 9 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
TI NOVEL USE OF TAUROLINE.
PI WO 8701591 A2 19870326
FDT WO400000 WITH DECLARATION UNDER ARTICLE 17(2)(A), WITHOUT ABSTRACT; TITLE NOT CHECKED BY THE INTERNATIONAL SEARCHING AUTHORITY
Types of search

The definitions of the codes can be seen from the tables below.

For Germany:

<table>
<thead>
<tr>
<th>Country</th>
<th>Kind</th>
<th>Extended</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>C1</td>
<td>D1</td>
<td>Grant of a patent without OS</td>
</tr>
<tr>
<td>DE</td>
<td>C2</td>
<td>D2</td>
<td>Grant of a patent after the examination procedure</td>
</tr>
<tr>
<td>DE</td>
<td>C2</td>
<td>D3</td>
<td>Limited patent maintenance (without OS)</td>
</tr>
<tr>
<td>DE</td>
<td>C2</td>
<td>D4</td>
<td>Limited patent maintenance (with OS)</td>
</tr>
<tr>
<td>DE</td>
<td>C3</td>
<td>D5</td>
<td>Patent changed in the restriction procedure No OS, no changed PS</td>
</tr>
<tr>
<td>DE</td>
<td>C3</td>
<td>D6</td>
<td>Patent changed in the restriction procedure No OS, changed PS</td>
</tr>
<tr>
<td>DE</td>
<td>C4</td>
<td>D7</td>
<td>Patent changed in the restriction procedure With OS, without changed PS</td>
</tr>
<tr>
<td>DE</td>
<td>C4</td>
<td>D8</td>
<td>Patent changed in the restriction procedure With OS, with changed PS</td>
</tr>
</tbody>
</table>

On PCT publications the 6 digit code has the definitions as shown below:

<table>
<thead>
<tr>
<th>Position</th>
<th>Value</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>With international search report</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>With declaration under art. 17(2)(a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without classification and without abstract; title not checked by the International Searching Authority</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Without international search report and to be republished upon receipt of that report</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>With declaration under Article 17(2)(a).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without abstract; title not checked by the International Searching Authority</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>With amended claims</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>With amended claims and statement</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Before expiration of time limit for amending the claims and to be republished in the event of the receipt of the amendments</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>In English translation (filed in ...)</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Before the expiration of the time limit referred to in Article 21(2)(a) on the request of the applicant</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Upon request of the applicant under article 64(3)(c)(i)</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>In accordance with Art. 64(3)(c)(ii) upon the publication of a patent based on the international application referred to herein, issued by the United States Patent and Trademark Office on &lt;date&gt; under serial number &lt;number&gt;</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>With a request for rectification under Rule 91.1 (f)</td>
</tr>
</tbody>
</table>

In 2003 the WIPO changed this coding for PCT publications; the numbers were replaced by letters.

The letters have the following explanations:


The codes below appearing after the heading “Published/Publiée” indicate that the corresponding text matter was published on the front page of the PCT pamphlet:

- a With amended claims.
- b With amended claims and statement.
- c Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.
- d Upon request of the applicant under Article 64(3)(c)(i).
- e In accordance with Article 64(3)(c)(ii) upon publication of a patent based on the international application, issued by the United States Patent and Trademark Office on <date> under serial number <number>.
- f Upon request of the applicant, before the expiration of the time limit referred to in Article 21(2)(a).
- g Without classification; title and abstract not checked by the International Searching Authority.
- h With declaration under Article 17(2)(a); without classification and without abstract; title not checked by the International Searching Authority.
- i With declaration under Article 17(2)(a); without abstract; title not checked by the International Searching Authority.
Under Rule 91.1(f), with a request for rectification.

With (an) indication(s) in relation to deposited biological material furnished under Rule 13bis separately from the description.

With a declaration as to non-prejudicial disclosures or exceptions to lack of novelty.

With an indication in relation to a priority claim considered not to have been made.

Published entirely in electronic form (except for the front page) and available upon request from the International Bureau.

Sequence listing part of description published separately in electronic form and available upon request from the International Bureau.

The codes below that appear after the heading “Declaration(s)/Déclaration(s)” indicate that a text corresponding to the following wording was published on the front page of the PCT pamphlet:

Declaration as to the identity of the inventor (Rule 4.17(i)).

Declaration as to applicant’s entitlement to apply for and be granted a patent (Rule 4.17(ii)).

Declaration as to the applicant’s entitlement to claim the priority of the earlier application (Rule 4.17(iii)).

Declaration of inventorship for the purposes of the designation of US only (Rule 4.17(iv)).

Declaration as to non-prejudicial disclosures or exceptions to lack of novelty (Rule 4.17(v)).

And finally:

With international search report

Without international search report and to be republished upon receipt of that report

### 44.7 Using proximity operators

In this section, the use of proximity operators in the number fields is considered, this being important in particular in databases employing the dynamic principle where there may be information of several publications or applications in the respective field. In databases employing a static principle with segmentation there may be various publication and application data within the same documentation unit, but one record (level, file segment) only holds information of one single publication/application. That is why for these fields the same rules apply as for other fields in these databases.

An exception is with the data of **Priority applications**. There may be a number of priority applications in the PRAI field in any of the databases. To link the information of one priority application within the priority field, i.e. within one entry in the PRAI field, between the /PRC, /PRD, /PRN, and /PRY fields, **(S) proximity** is used.

In the tables below it is shown which Boolean and proximity operators may be used to link the information belonging to the same patent:

<table>
<thead>
<tr>
<th>DWPI</th>
<th>PI (PN, PC)</th>
<th>AI</th>
<th>PRAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI (PN, PC)</td>
<td>(P)</td>
<td>(P)</td>
<td>AND</td>
</tr>
<tr>
<td>AI</td>
<td>(P)</td>
<td>(P)</td>
<td>AND</td>
</tr>
<tr>
<td>PRAI</td>
<td>AND</td>
<td>AND</td>
<td>(S)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DWPI</th>
<th>PI (PD, PY, PK)</th>
<th>AI</th>
<th>PRAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI (PD, PY, PK)</td>
<td>(P)</td>
<td>(L)</td>
<td>AND</td>
</tr>
<tr>
<td>AI</td>
<td>(L)</td>
<td>(P)</td>
<td>AND</td>
</tr>
<tr>
<td>PRAI</td>
<td>AND</td>
<td>AND</td>
<td>(S)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAPLUS</th>
<th>PI</th>
<th>AI</th>
<th>PRAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI</td>
<td>(L) oder (P)</td>
<td>(L) oder (P)</td>
<td>AND</td>
</tr>
<tr>
<td>AI</td>
<td>(L)</td>
<td>(L) oder (P)</td>
<td>AND</td>
</tr>
<tr>
<td>PRAI</td>
<td>AND</td>
<td>AND</td>
<td>(S)</td>
</tr>
</tbody>
</table>
Types of search

<table>
<thead>
<tr>
<th>PATDPA</th>
<th>PI.M</th>
<th>AI</th>
<th>PRAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI.M</td>
<td>(P)</td>
<td>AND</td>
<td>AND</td>
</tr>
<tr>
<td>AI</td>
<td>AND</td>
<td>(S)</td>
<td>AND</td>
</tr>
<tr>
<td>PRAI</td>
<td>AND</td>
<td>(S)</td>
<td></td>
</tr>
</tbody>
</table>

In **DWPI** the **Publication and Application Information** of one patent can be searched by using **(P) proximity**, linking the /PC and /PN fields. To link the /PD, /PY, /PK and even /ICM (IPC1–7) fields **(L) proximity** must be used, further limitation is possible by linking to the DLVL (Document Level Qualifier) field:

```plaintext
=> S | P | PC (L) | P | AC (L) | PD>20050101 (L) | PUBLICATION/DLVL
L1  727701 | P | PC (L) | P | AC (L) | PD>20050101 (L) | PUBLICATION/DLVL
```

In the ADT (Application Details) **DISPLAY** field the publication details are displayed together with the respective application information. The application information of one publication makes up one paragraph (see above, **(P) proximity**). Separation of the paragraphs is made by semicolon. Within one paragraph there may be the information of a number of applications separated by commas. The information of one such application (/AC, /AD, /AP, and /AY search fields) is linked by **(P) proximity**.

In **PATDPA** the data of the family (DE, EP und WO) is entered in the FI field. The entries are linked by these operators:

<table>
<thead>
<tr>
<th>PATDPA</th>
<th>FIP</th>
<th>FIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIP</td>
<td>(P)</td>
<td>AND</td>
</tr>
<tr>
<td>FIA</td>
<td>AND</td>
<td>(S)</td>
</tr>
</tbody>
</table>

Related patents (e.g. addition and division applications) are recorded in the RLI (Related application information) field. In databases having this field it may usually be searched using **(S) proximity**. The same goes for entries in the REP (Referenced patent information) field.

### 44.8 Notes on DWPI at publication level

<table>
<thead>
<tr>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>APTS</td>
<td>APTS</td>
<td>Application Number, Thomson Scientific</td>
</tr>
<tr>
<td>PRTS</td>
<td>PRTS</td>
<td>Priority Number, Thomson Scientific</td>
</tr>
<tr>
<td>PRC.B, PRD.B, PRN.B, PRY.B</td>
<td>PRTS</td>
<td>Priority Country, Basic, Priority Date, Basic, Priority Number, Basic, Priority Year, Basic</td>
</tr>
<tr>
<td>SLM, FS.M, FA.M</td>
<td>SLM, FS.M</td>
<td>Summary Language, Member, File Segment, Member, Field Availability, Member</td>
</tr>
</tbody>
</table>

At publication level there may be the Title, Abstract and Claims in English, French or German. The search result can be limited to a certain language by using the /SL.M field:

```plaintext
=> DE/SL.M
L18  2203735 DE/SL.M

=> D TIDE
L18  ANSWER 1 OF 2203735 WPI INDEX COPYRIGHT 2006 THE THOMSON CORP on STN
Member(0001)
TIDE FLAECIGES IMPLANTAT UND VERFAHREN ZU SEINER HERSTELLUNG

Member(0002)
TIDE Flaechiges Implantat und Verfahren zu seiner Herstellung
```

The fields APTS and PRTS are available in addition to the AI (ADT) and PRAY display fields at publication level. These fields contain additional information from the original data (DE, EP, US, PCT, JP, etc.). These fields were added by Thomson Scientific (in the appropriate format). Before complete application details were only available starting from 1992.

```plaintext
Member(0001)
PI  DE 1769181  B  19750123 (199911)* DE 3[0]
```
TIDE Waermeisolierstoffplatte aus Schaumkunststoff, sowie Verfahren zu deren Herstellung
AG AG.T Strohschaenk, H., Dipl.-Ing., Patentanwalt, 8000 Muenchen
PA (ROCA-C) ROCKWOOL AB
ADT DE 1769181 B
APTS 1968DE-001769181
PRAI SE 1967-6602 19670511
PRTS 1967SE-000006602
45 Family search

45.1 Typical family searches

- Oppositions against competitors' patents: to monitor the patent families in order to be able to submit an opposition immediately when a patent is granted (e.g. DE or EP)
- Identification of potential markets for certain technologies
- Monitoring competitor activities in certain markets
- Finding family members in English (German)
- Finding family members for obtaining full-text documents
- „Freedom to operate": Use of technologies in countries, where there is no patent protection
- Commercial evaluation and utilization of patents: it is important in how many and in which countries patents were applied for, e.g. in licensing negotiations or Due Diligence in mergers and acquisitions

45.2 International patent families

All patent publications in different countries that concern the same invention, form a patent family. The members of this patent family refer to the same initial patent application (the priority application). The legal basis for this is the Paris Convention for the Protection of Industrial Property of 1883. If a patent application is filed in any member state of the Paris Convention further applications can be filed in other member states within the priority term of one year and claim the priority of the first application. Merging world-wide patent publications into one family representing an invention is an effective and time-saving way both for database producers creating family-based databases and for patent searchers to evaluate their search results.

The publications of family members of one country are called national patent families.

Types of patent families include:

- Conventional patent family
  - The same priority application(s)
  - The same applicant/inventor
  - The same subject matter
- Non-conventional patent family
  - No claim to the same priority application
  - The same applicant/inventor
  - The same subject matter
- Technical patent families
  - The same subject matter
  - Competing patent applications or same applicant/inventor

When referring to patent families this usually means conventional patent families. These are covered in all data bases having patent families. Non-conventional and technical patent families are much more special and are covered in few patent databases (DWPI, IMSPATENTS).

2 The right to a priority can be transferred.
It is common that not only one priority but multiple priorities are claimed. This can lead to very complex patent families. To understand these patent families it is necessary to look into the patent law of the individual countries. One finds a few terms in this context, which, however, we will not explain here:

- Multiple priority and partial priority,
- DE: Internal Priority, Division, Additional Application, Utility Model Derivation,
- US: Continuation, Continuation-in-part, Division, Provisional Application.

### 45.2.1 Publications within one patent family

- National applications: each family member as an application and a publication/patent number,
- International applications: application is made through the PCT procedure
  - Granted national patents get a number
  - Entry into the national phase is published by these countries in the legal status: AR, AT, AU, BE, BR, CA, CH, CN, CO, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HK, HU, IE, IL, IT, JP, LT, LU, MC, MD, NL, NO, NZ, PE, PH, PL, PT, RU, SE, SI, SK, TW, US, WO, ZA
  - Non-entry into the national phase of PCT applications is published by these countries in the legal status: CA, DE, JP, KR
- European applications: application and grant are made through the EPO, some countries assign a national application/publication number:
  - Countries with national application/publication numbers: DE, ES, AT
  - Information in the EP legal status “Corresponds to”, “Entry Into National Phase” or information on payment of maintenance fees: AT, BE, BG, CH, CZ, CY, DE, DK, EE, ES, FI, FR, GB, GR, HK, HU, IE, IL, IT, LI, LT, LU, LV, MC, MD, NL, PL, PT, RO, RU, SE, SI, SK, TR

### 45.2.2 Example of a simple patent family

<table>
<thead>
<tr>
<th>Priority application</th>
<th>Applications claiming priority</th>
<th>Publication of the application</th>
<th>Grant of patent</th>
<th>National number for EP patent</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 2007-11-08</td>
<td>...</td>
<td>USA1 2008-05-15</td>
<td>...</td>
<td>USB2 2008-09-02</td>
</tr>
<tr>
<td>DE 2006-11-15</td>
<td>...</td>
<td>DEA1 2008-05-21</td>
<td>...</td>
<td>DEB4 2008-09-18</td>
</tr>
<tr>
<td>EP 2007-11-13</td>
<td>...</td>
<td>EPA1 2008-05-20</td>
<td>...</td>
<td>EPB1 2010-01-06</td>
</tr>
<tr>
<td>0</td>
<td>Up to 12 months</td>
<td>After 18 months</td>
<td>...</td>
<td>Up to 20 years patent term</td>
</tr>
</tbody>
</table>

### 45.3 Family information in STN patent databases

<table>
<thead>
<tr>
<th>Database</th>
<th>Countries</th>
<th>Families</th>
<th>Family relations</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA; CAPPLUS</td>
<td>&gt;60 countries, including EP, WO</td>
<td>Selected families</td>
<td>National International, conventional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>non-conventional families</td>
<td>International, non-conventional</td>
</tr>
<tr>
<td>INPADOCDB, INPAFAMDB</td>
<td>95 Patent authorities, including EP, WO</td>
<td>95 countries, including EP and WO</td>
<td>National International, conventional</td>
</tr>
</tbody>
</table>
45.3.1 Family documents in the databases

- Family document in DWPI (display format: IBIB):

  ACCESSION NUMBER: 2010-C36080 [19] WPI INDEX
  TITLE: Producing a semiconductor wafer, comprises disposing the semiconductor wafer in a cutout in a carrier, and ...
  DERWENT CLASS: L03; U11
  INVENTOR: HAIR G; HEIER G; HEILMAIER A; ROETTGER K; GEREUHAREUTEU H; KEULRAUSEU R
  PATENT ASSIGNEE: (WACK-C) WACKER SILTRONIC GES HALBLEITEMATERIALI; (SILT-N) SILTRONIC AG
  COUNTRY COUNT: 4
  PATENT INFO ABBR.: An asterisk * identifies the Derwent Basic patent

<table>
<thead>
<tr>
<th>PATENT NO</th>
<th>KIND</th>
<th>DATE</th>
<th>WE A</th>
<th>PG</th>
<th>MAIN IPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 20100055908</td>
<td>A1</td>
<td>20100304</td>
<td>201019*</td>
<td>EN</td>
<td>6[2]</td>
</tr>
<tr>
<td>CN 101659027</td>
<td>A</td>
<td>20100303</td>
<td>(201019)</td>
<td>ZH</td>
<td></td>
</tr>
<tr>
<td>JP 2010056530</td>
<td>A</td>
<td>20100311</td>
<td>(201019)</td>
<td>JA</td>
<td>17</td>
</tr>
<tr>
<td>KR 2010025470</td>
<td>A</td>
<td>20100309</td>
<td>(201020)</td>
<td>KO</td>
<td></td>
</tr>
</tbody>
</table>

  APPLICATION DETAILS:

<table>
<thead>
<tr>
<th>PATENT NO</th>
<th>KIND</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 20100055908</td>
<td>A1</td>
<td>US 2009-547749 20090826</td>
</tr>
<tr>
<td>JP 2010056530</td>
<td>A</td>
<td>JP 2009-164436 20090713</td>
</tr>
<tr>
<td>CN 101659027</td>
<td>A</td>
<td>CN 2009-10168313 20090827</td>
</tr>
<tr>
<td>KR 2010025470</td>
<td>A</td>
<td>KR 2009-70077 20090730</td>
</tr>
</tbody>
</table>

  PRIORITY APPLN. INFO: DE 2008-102008044646 20080827

  Each family member claims the same German priority.

- Family document in CAPLUS (display format: IBIB):

  ACCESSION NUMBER: 2010-275910 HCAPLUS
  TITLE: Method for producing a semiconductor wafer
  INVENTOR(S): Roettger, Klaus; Heier, Gerhard; Heilmaier, Alexander
  PATENT ASSIGNEE(S): Siltronic AG, Germany
  CODEN: USXXCO
  DOCUMENT TYPE: Patent
  LANGUAGE: English
  FAMILY ACC. NUM. COUNT: 1
  PATENT INFORMATION:

<table>
<thead>
<tr>
<th>PATENT NO</th>
<th>KIND</th>
<th>DATE</th>
<th>APPLICATION NO.</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 20100055908</td>
<td>A1</td>
<td>20100304</td>
<td>US 2009-547749 20090826</td>
<td></td>
</tr>
<tr>
<td>JP 2010056530</td>
<td>A</td>
<td>JP 2009-164436 20090713</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CN 101659027</td>
<td>A</td>
<td>CN 2009-10168313 20090827</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KR 2010025470</td>
<td>A</td>
<td>KR 2009-70077 20090730</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

  PRIORITY APPLN. INFO: DE 2008-102008044646 20080827

  Each family member claims the same German priority.

- Family document in INPAFAMDB (display format BRIEF: bibliographical details + patent family table):

  AN 38875177 INPAFAMDB EDF 201000204 EWF 2010005 UPFB 20121122 UWF 201247
  TI Device for heating moulded parts, in particular of ceramic, moulded dental parts.
The device has a microwave generator that impinges a susceptor with microwave radiation, where the susceptor is arranged between a molding.

45.3.2 Quality improvements in INPADOC families by FIZ Karlsruhe

Priority, application and publication numbers need to be correct in order to be able to correctly bring together the patent families. FIZ Karlsruhe performs a quality inspection of the original data provided by EPO:

- New numbers are compared to standard formats; all numbers not meeting these standards are filtered, checked by a human and corrected
- Individual errors (e.g. wrong priority number on a document) are corrected by a human, using a variety of sources
- Error corrections are online very quickly, usually within one week

The UPFC update field shows how many mergers or splits were made at a given date:

```plaintext
=> E 2010/UPFC 25
E1  80  20091217/UPFC
E2  90  20091224/UPFC
E3  0   20100000/UPFC
E4  26  20100104/UPFC
E5  141  20100401/UPFC
E6  143  20100408/UPFC
E7  102  20100415/UPFC
E8  119  20100422/UPFC
E9  86  20100429/UPFC
E10 121  20100508/UPFC
E11  67  20100514/UPFC
E12  96  20100520/UPFC
E13 140  20100527/UPFC
**** END OF FIELD ****
```
Types of search

45.3.2.1 Merger of patent families by correction of numbers
Correction of the priority number of US20090083750 (misprint on the original document):
CN2007-11017879 => CN2007-10178796

45.3.2.2 Split of false patent families by correction of numbers
Correction of the priority number of US20080021851: US2006-492395 => US2006-492355

45.4 The patent family definitions of the database producers
The database producers use a number of different definitions of a patent family. This definition determines what goes into one database document. In DWPI and CAPLUS there may be more than one database record for the same invention. These documents contain information on other documents of the family being available in the database. These complex families may be assembled using a family search or family display.

45.4.1 INPADOCDB and INPAFAMDB

45.4.1.1 Database structure
INPADOCDB and INPAFAMDB are the patent databases with the widest country coverage. The data of 95 patent organizations (including EP and WO) are covered.

One document in INPADOCDB includes all publications which are based on one national application. This includes the bibliographical details of all publication levels as well as the legal status details. Both parts of the document, the bibliography and the legal status, are updated continuously.

For every invention (patent family) a number of documents is created in INPADOCDB that corresponds to the number of applications per invention.
The database indexes in INPADOCDB relate to the respective applications. This way it is possible to search, display, and monitor the information of individual applications, publications, and legal status details. Specific update codes are available to monitor selected applications. Using family related update codes it is also possible to monitor patent families.

### 45.4.1.1.1 Family definition in INPADOCDB

In INPADOCDB, all publications that are directly or indirectly linked through a claimed priority belong to one patent family (the so-called INPADOC family definition). Based on this definition, a family number FN is assigned to every individual document that belongs to a patent family when the database is built and whenever the database is updated.

<table>
<thead>
<tr>
<th>Family number FN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication D1</td>
</tr>
<tr>
<td>Publication D2</td>
</tr>
<tr>
<td>Publication D3</td>
</tr>
<tr>
<td>Publication D4</td>
</tr>
<tr>
<td>Publication D5</td>
</tr>
</tbody>
</table>

### 45.4.1.1.2 Database structure of INPAFAMDB

The INPADOCDB Family Number FN is used as the Accession Number AN of the corresponding (family) document in INPAFAMDB (AN = FN). This compilation of individual documents into patent family documents is re-performed, and checked, with every update of the database, i.e. there is only one document per patent family. This is different from e.g. DWPI or CAPLUS where a different, narrower family definition is used. In those databases it is possible that due to multiple priorities more than one (family) document exists for a given invention.

INPAFAMDB has this structure:

```
<table>
<thead>
<tr>
<th>Document 1</th>
<th>Document 2</th>
<th>Document N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st publication</td>
<td>1st publication</td>
<td>1st publication</td>
</tr>
<tr>
<td>2nd publication</td>
<td>2nd publication</td>
<td>2nd publication</td>
</tr>
<tr>
<td>Legal status</td>
<td>Legal status</td>
<td>Legal status</td>
</tr>
</tbody>
</table>
```

The database indexes in INPADOCDB relate to the respective applications. This way it is possible to search, display, and monitor the information of individual applications, publications, and legal status details. Specific update codes are available to monitor selected applications. Using family related update codes it is also possible to monitor patent families.

76 million publications → 65 million documents → 42 million patent families

All documents that belong to one patent family are assigned the same Family Number FN in INPADOCDB.
Types of search

This Family Number is the Accession Number AN of the corresponding family document in INPADOCDB.

This is used in Espacenet, for classification of patent documents using the CPC and for the MCD database. A "simple family" consists of all documents that share the same priority or the same combination of priorities. The INPADOC family above therefore forms 4 "simple families":

**45.4.1.2 EPO “Simple Family”**

The European Patent Office also defines the so-called “EPO simple family”. This is used in Espacenet, for classification of patent documents using the CPC and for the MCD database. A “simple family” consists of all documents that share the same priority or the same combination of priorities. The INPADOC family above therefore forms 4 “simple families”:
However, a detailed analysis by the EPO of given patent documents can lead to some priorities being considered "non-active". This means that these priorities are ignored for simple patent families. This assessment may change when new facts come up, e.g. a new publication. It may be said that these priorities are “active”, which define the technical contents of the “simple family”. WO priorities are often non-active because they share the same technical contents with the national applications. Active and non-active priorities are marked in the documents (Y = active priority, N = non-active priority).

A “simple family” is created for WO 2007009624.

Y = active priority
N = non-active priority.

45.4.2 DWPI

All family members in one database document have the same priorities as the Basic Patent, the first family member that was used for indexing by Thomson Reuters.

When a new priority appears this publication is the basis for a new document in the database:

- Each database document has a reference to other documents belonging to the same family in the CR (Cross Reference) field
- Complex patent families result from multiple priorities being assigned to one patent application, in particular if there are Continuations in part.

The DWPI family is well suited to find closely related family members in a big patent family which is beneficial when reviewing search results.

Different Basic Patents may be used for indexing in DWPI and CAPLUS.

45.4.3 CAPLUS

All family members in one database document have the same priorities as the Basic Patent. In case of complex patent families more than one document is created in the database for one family.

In contrast to DWPI the same patent numbers may appear in more than one database document.

Whether a new family document is created is decided based on the priorities. New family documents are created in CAPLUS when new priorities appear. A hint that there are other documents of the same family can be found in the FAN.CNT (Family Accession Number Count) field.

Other reasons to create more than one document in the database for a family are:

- Many substances that must be indexed, exceeding the limit for one document.
- From 2008-07-01 one family document is created and indexed for the oldest national priority of US, DE, GB, FR, CA, EP and a second document for the WO application (WO documents often contain more information, including more chemical structures).
45.5 Family searches on STN

45.5.1 Family display formats

In the international family databases there are specific display formats:

<table>
<thead>
<tr>
<th>Database</th>
<th>Family format</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DWPI</td>
<td>IBIB</td>
<td>Family information of one database document</td>
</tr>
<tr>
<td>HCAPPLUS</td>
<td>IBIB</td>
<td>Family information of one database document</td>
</tr>
<tr>
<td>INPAFAMDB</td>
<td>BRIEF</td>
<td>De-duplicated format for the full family</td>
</tr>
</tbody>
</table>

In INPAFAMDB one family document always comprises the complete family.

45.5.2 Searching patent families using FSEARCH / FSORT commands

The FSEARCH and FSORT commands can be used for enhanced family searching in individual databases (e.g. INPADOCDB, DWPI, HCAPPLUS) and for cross-file family searches (e.g. DWPI, HCAPPLUS). In INPAFAMDB the full family is collected in one document, so the FSEARCH and FSORT commands are not needed.

Using FSEARCH the system automatically selects publication numbers and application numbers (PN, APPS) from a previous search result and searches them in the database or databases of interest. This procedure is repeated until no more documents are found (it stops after 4 iterations but can be started again). The starting point for FSEARCH can be:

- a publication number,
- an application number,
- an E numbers list or a L number (SELECT or SmartSELECT result),
- a L number or L number list, or
- a search profile.

FSEARCH always closes with a FSORT.

FSORT sorts an answer set (L number) to family groups by the publication and application numbers found. Two records are considered to belong to the same patent family if the publication numbers, the application numbers or the priority numbers match. The resulting patent families and the appropriate answers are listed.

Both commands are free of charge. Instead of using databases with search-term pricing, it is, however, advisable to search H files (i.e. HCA, HPATENTS instead of CA, PATENTS) where search terms are not charged.

Following the FSORT procedure, the display command \texttt{D PFAM 1} allows to display only one document of each patent family. Any display format may be used together with PFAM.

FSORT can also be used to identify and/or eliminate duplicates in multi-file searches. The Patent family manager of STN Express is very useful for this purpose (see the “Multifile” search example).
Guide to STN Patent Databases

An example of a family search using FSEARCH in DWPI can be found in the “Family” search example. An example using FSORT and the PFAM format can be found in the “Multifile” search example.

45.5.3 INPADOCDB and INPAFAMDB

45.5.3.1 Family display formats in INPADOCDB and INPAFAMDB

For all answers retrieved in a search (e.g. publication number, application number, names, etc.) the patent family can be displayed. When entering DISPLAY followed by the family format, the system automatically identifies the relevant priority number and displays the patent family. It is recommended to use the DISPLAY BROWSE (D BRO) command to make sure you will be charged only once even if there are multiple display formats involved.

```
=> S US20100046623/PN
L9 1 US 20100046623/PN
   (US20100046623/PN)
```

```
=> D BRO :CFAM2
PATENT FAMILY INFORMATION
AN 38985104 INPAFAMDB

+---------- Publications +---------- +---------- Applications +---------- +
| CN 101656825 A 20100224  | CN 2009-10170901 A 20090818 |
| CN 101656825 B 20120328  |
| CN 101873489 A 20101027  | CN 2010-10150205 A 20100419 |
| EP 2244485 A2 20101027  | EP 2010-3916 A 20100413 |
| HK 2143777 A1 20121116  | HK 2010-107643 A 20100810 |
| KR 20100022447 A 20100302 | KR 2009-76682 A 20090819 |
| TW 2010026054 A 20100701 | TW 2009-127871 A 20090819 |
| US 20100046623 A1 20100225 | US 2009-400736 A 20090309 |
| US 20100046615 A 20100225 | US 2009-427440 A 20090421 |

+---------- Priorities +----------
| US 2008-90075P P 20080819 |
| US 2009-400736 A 20090309 |
| US 2009-427440 A 20090421 |

3 priorities, 9 applications, 10 publications (2 EPO simple families)

Using FFAM all bibliographical data of the full patent family including the legal status are displayed. If only the family and legal status information of one particular country is wanted this can be displayed with the FFAM.PC format (Reduced price family display, PC being replaced by the country code of the respective country):

```
: FFAM, EP
```

```
... 
MEMBER 3 
...
```

```
AN 38985104 INPAFAMDB ED 20100225 EW 201008 UP 20110603 UW 201122
DN 60403521
TI Verfahren und System zur bewegungskompensierten Rahmenraten-Aufwaertsumsetzung fuer komprimierte und dekomprimierte Video-Bitstroeme.
...
TL German; English; French
IN CHEN, XUEMIN; KELLERMAN, SHARKUS
INS CHEN XUEMIN, US; KELLERMAN SHARKUS, US
PA BROADCOM CORPORATION
PAS BROADCOM CORP, US
DT Patent
PI EP 2157791 A2 201000224 English
PIT EPAZ APPLICATION PUBLISHED WITHOUT SEARCH REPORT
DAV 20100224 unexamined-printed-without-grant
STA PRE-GRANT PUBLICATION
DS R: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR
XS R: AL BA RS
```
SFAM is a display format for the “EPO simple family” (see Espacenet):

For US20100046623 there are 2 simple families:

:SFAM

PATENT FAMILY INFORMATION

AN 38985104 | INPAFAMDB

-----------------------------------------
EPO simple family (SFN): 41346706

-----------------------------------------

+-------+ Publications ++ Applications ++
CN 101656825 A 20100224 CN 2009-10170901 A 20090818
CN 101656825 B 20120328
HK 1143177 A1 20121116 HK 2010-107643 A 20100810
KR 2010022447 A 20100302 KR 2009-76682 A 20090819
TW 2010026054 A 20100701 TW 2009-127871 A 20090819
US 2010046623 A1 20100225 US 2009-400736 A 20090309

+-------+ Priorities +++++++++
US 2008-90075P P 20080819 (USP, 20100225, Y)
US 2009-400736 A 20090309 (USA, 20100225, Y)

================================---------
EPO simple family (SFN): 42320901

================================---------

+-------+ Publications ++ Applications ++
CN 10873489 A 2010027 CN 2010-10150205 A 20100419
EP 2244485 A2 2010027 EP 2010-3916 A 20100413
US 2010046615 A1 20100225 US 2009-427440 A 20090421

+-------+ Priorities ++++++++
US 2009-427440 A 20090421 (USA, 20100304, Y)
US 2009-400736 A 20090309 (USA2, 20100225, N)
US 2008-90075P P 20080819 (USP, 20100225, N)

3 priorities, 9 applications, 10 publications (2 EPO simple families)

:END

Y – active priorities
At the end of the tabular family display formats, the number of priorities, applications and publications is printed (Patent Family Counts):

3 priorities, 9 applications, 10 publications (2 EPO simple families)

In INPAFAMDB, there are Search and Select fields for these “counters” that can be used to analyze the patent application policy of patent assignees:

<table>
<thead>
<tr>
<th>Family Counts</th>
<th>Search/Select Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number Counts</td>
<td>ACNT</td>
</tr>
<tr>
<td>Priority Number Counts</td>
<td>PRCNT</td>
</tr>
<tr>
<td>EPO Simple Family Number Counts</td>
<td>FCNT</td>
</tr>
</tbody>
</table>

=> S (INA (S) SCHEFFLER) / PA, PAS
L36 2575 (INA (S) SCHEFFLER) / PA, PAS

=> ANA 1- ACNT
L37 ANALYZE L36 1- ACNT : 15 TERMS

=> D 1-
L37 ANALYZE L36 1- ACNT : 15 TERMS

On average, Ina Schaeffler files 3.89 patent applications per individual invention.

<table>
<thead>
<tr>
<th>TERM #</th>
<th># OCC</th>
<th># DOC</th>
<th>% DOC</th>
<th>ACNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1089</td>
<td>1089</td>
<td>42.29</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>449</td>
<td>449</td>
<td>17.44</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>284</td>
<td>284</td>
<td>11.03</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>208</td>
<td>208</td>
<td>8.08</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>193</td>
<td>193</td>
<td>7.50</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>163</td>
<td>163</td>
<td>6.33</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>91</td>
<td>91</td>
<td>3.53</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>54</td>
<td>54</td>
<td>2.10</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>22</td>
<td>22</td>
<td>0.85</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>9</td>
<td>9</td>
<td>0.35</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>6</td>
<td>6</td>
<td>0.23</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>3</td>
<td>0.12</td>
<td>13</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
<td>2</td>
<td>0.08</td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>1</td>
<td>0.04</td>
<td>14</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>1</td>
<td>0.04</td>
<td>21</td>
</tr>
</tbody>
</table>

********** END OF L37 **********

In INPADOCDB and INPAFAMDB it is possible to monitor patent families (see “Monitoring patents”).

45.5.3.2 Other family display formats in INPADOCDB and INPAFAMDB

INPADOCDB: The bibliographical details of the national patent families can be displayed. As these documents can be very large there is a de-duplicated display format BRIEF containing the most essential information on the national patent family:

=> D BRIEF

AN 64740525  INPADOCDB  FN 42001438  EDP 20110512
TI Electric lifting stator inner cavity cyclometer.
IN WENFENG XU; XIAOMING ZENG
PAS HANGZHOU FROMO ELECTROMECHANICAL TECHNOLOGY CO LTD
PI CN 102042792         A  20110504
CN 102042792         B  20111207
DT Patent
AI CN 2009-10310020 A 20091120
PRAI CN 2009-10310020 A 20091120 (CNA, 20110512, Y)
IPCI G01B0005-20 [I,A]
AB The invention relates to an electric lifting stator inner cavity cyclometer, which provides a stator inner cavity cyclometer with the advantages of convenience for operation and use and high measuring ...

292
INPAFAMDB: To allow a quick survey of the patent family there are non-redundant (de-duplicated) display formats. These formats merge the most essential information of each field unit. When these formats are used all field contents that are repeated identically within the family are displayed only once. The default format in this database is the non-redundant BRIEF format. This format displays the non-redundant bibliographical details, a selected abstract, and the family details (PI, AI, PRAI).

With the non-redundant BRIEF format only the English title is displayed. For the inventors and the patent assignee only the original names are displayed in the standardized fields, INS and PAS respectively.

=> D BRIEF

AN  AN  34427091 INPAFAMDB UPFB 20120719 UWF 201229
TI  CONTROL UNIT.
   . CONTROL DEVICE.
INS  KALIPPKE HARALD DIPL.ING., DE; FRANZ MANFRED, DE; RENNINGER ERHARD DIPL.ING., DE; MEIWES JOHANNES DR.ING., DE; GERHARD ALBERT, DE; HAMMER UWE DIPL.ING., DE; KALIPPKE HARALD, DE; RENNINGER ERHARD, DE; MEIWES JOHANNES, DE; HAMMER UWE, DE
PAS  BOSCH GMBH ROBERT, DE
IPCR  F02M0069-32 [I,A]; F02D0009-16 [I,A]; F02M0003-06 [N,A]; F02M0003-07 [I,A]; F16K0031-06 [I,A]
CPC  F02D0009-16; F02M0003-07; F02M2003-067; F16K0031-0682
EPC  F02D0009-16; F02M0003-07; F16K0031-066F
ICO  R02M0003:06R
NCL  NCLM 251/129.110
NCL  251/129.120
INCL  NCLM 251/129.110
INCL  251/129.120
AB  (US 5232197 A)

PATENT FAMILY INFORMATION INPAFAMDB

+-------- Publications --------+ +-------- Applications --------+
DE 4038762 A1 19920611 DE 1990-4038762 A 19901205
US 5232197 A 19930803 US 1992-910304 A 19920721

+-------- Priorities --------+
DE 1990-4038762 A 19901205
WO 1991-DE893 W 19911115

2 priorities, 6 applications, 7 publications (1 EPO simple family)

All display fields (TI, PA, IN, etc.) and the display formats (BIB, ALL, etc.) in INPAFAMDB relate to the patent family and are not reduced:

=> D TI IN PA
TI  STELLEINRICHTUNG.
   . CONTROL UNIT.
   . DISPOSITIF DE REGLAGE.
   . CONTROL DEVICE.
IN  KALIPPKE, HARALD, DIPL.ING., 7141 BENNINGEN, DE; FRANZ, MANFRED, 7257 DITZINGEN, DE; RENNINGER, ERHARD, DIPL.ING.; MEIWES, JOHANNES, DR.ING., 7145 MARKGRÖHENINGEN, DE; GERHARD, ALBERT, 7146 TAMM, DE; HAMMER, UWE, ...
PA  BOSCH GMBH, 7000 STUTTGART, DE
   . BOSCH GMBH, POSTFACH 30 02 20, W-7000 STUTTGART 30
   . BOSCH GMBH
   . BOSCH GMBH, POSTFACH 10 60 50, D-7000 STUTTGART 10
In addition there are these formats:

- **.F (or .M)** show all family members
- **.H** show only publications with HIT terms
- **.B** show the earliest publication
- **.P** show the latest publication
- **.U** show the latest updated publication(s)

### De-duplicated family formats

<table>
<thead>
<tr>
<th>De-duplicated family formats</th>
<th>.F (complete family)</th>
<th>.H (publication with HIT terms)</th>
<th>.B (earliest publication)</th>
<th>.P (latest publication)</th>
<th>.U (latest updated publication(s))</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBIB</td>
<td>IBIB.F</td>
<td>IBIB.H</td>
<td>IBIB.B</td>
<td>IBIB.P</td>
<td>IBIB.U</td>
</tr>
<tr>
<td>STD</td>
<td>STD.F</td>
<td>STD.H</td>
<td>STD.B</td>
<td>STD.P</td>
<td>STD.U</td>
</tr>
<tr>
<td>ALL</td>
<td>ALL.F</td>
<td>ALL.H</td>
<td>ALL.B</td>
<td>ALL.P</td>
<td>ALL.U</td>
</tr>
<tr>
<td>ALLO</td>
<td>ALLO.F</td>
<td>ALLO.H</td>
<td>ALLO.B</td>
<td>ALLO.P</td>
<td>ALLO.U</td>
</tr>
<tr>
<td>IALL</td>
<td>IALL.F</td>
<td>IALL.H</td>
<td>IALL.B</td>
<td>IALL.P</td>
<td>IALL.U</td>
</tr>
<tr>
<td>IND</td>
<td>IND.F</td>
<td>IND.H</td>
<td>IND.B</td>
<td>IND.P</td>
<td>IND.U</td>
</tr>
<tr>
<td>MAX</td>
<td>MAX.F</td>
<td>MAX.H</td>
<td>MAX.B</td>
<td>MAX.P</td>
<td>MAX.U</td>
</tr>
<tr>
<td>MAXO</td>
<td>MAXO.F</td>
<td>MAXO.H</td>
<td>MAXO.B</td>
<td>MAXO.P</td>
<td>MAXO.U</td>
</tr>
<tr>
<td>MAXF</td>
<td>MAXF.F</td>
<td>MAXF.H</td>
<td>MAXF.B</td>
<td>MAXF.P</td>
<td>MAXF.U</td>
</tr>
<tr>
<td>IMAX</td>
<td>IMAX.F</td>
<td>IMAX.H</td>
<td>IMAX.B</td>
<td>IMAX.P</td>
<td>IMAX.U</td>
</tr>
<tr>
<td>PI</td>
<td>PI.F</td>
<td>PI.H</td>
<td>PI.B</td>
<td>PI.P</td>
<td>PI.U</td>
</tr>
<tr>
<td>TIPI</td>
<td>TIPI.F</td>
<td>TIPI.H</td>
<td>TIPI.B</td>
<td>TIPI.P</td>
<td>TIPI.U</td>
</tr>
<tr>
<td>PI.PDF</td>
<td>PI.PDF.F</td>
<td>PI.PDF.H</td>
<td>PI.PDF.B</td>
<td>PI.PDF.P</td>
<td>PI.PDF.U</td>
</tr>
</tbody>
</table>

### Full-text links

The display format PI.PDF contains a direct link to the original document (PDF) at the European Patent Office.

### 45.5.4 DWPI

The Derwent World Patents Index database (WPINDEX, WPIIDS, WPIX) is not quite as comprehensive as INPADOCDB/INPAFAMDB with regard to country coverage. In Derwent World Patents Index a dynamic design is implemented on the invention level, i.e. later publications of the same family are included into the same record. The first patent publication of a new patent family received at the database producer is the Basic Patent. All additional patent publications (equivalents) in this document have the same priority (or priorities) as the Basic Patent.

The FAM format is a very compact format for the patent family, the format IBIB presents the family in a very clear format:

```plaintext
=> D FAM
```

The asterisk * marks the Basic Patent. The family members are in chronological order.
<table>
<thead>
<tr>
<th>Patent No</th>
<th>Kind</th>
<th>Date</th>
<th>Week</th>
<th>LA</th>
<th>PG</th>
<th>Main IPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 6920074 B2</td>
<td>W</td>
<td>20050719</td>
<td>A</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US 20040037129 A1</td>
<td>W</td>
<td>20040916</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The "Application details" field places the application numbers next to the publication numbers.

**Filing details** help with the interpretation of the patent family.
With some types of family relations it is possible that there are other family members whose data are not part of the present record. In these cases the Accession Number of the respective record is available in the CR (Cross Reference) field:

=> D 1-2 AN CR FAM

The other family members may then be retrieved by these Accession Numbers in the /AN field or (better) by using the FSEARCH command (extended family search).

Once created, more data can be added to a document but it cannot be deleted.

Non-conventional Equivalents are added to the relevant patent families in the World Patents Index. Non-conventional Equivalents are patent applications based on the same invention but, however, a conventional priority was not claimed in later applications abroad for whatever reason. The following cases can occur:

- Patent applications, which were filed outside of the 12-month priority period
- Patent applications in countries that have not signed the Paris Convention
- Patent publications not citing any priority details, but where a document in DWPI already exists

The respective publication numbers are denoted by a hash sign, #, in the PI field.
45.5.5 Chemical Abstracts Plus

The CAPLUS database holds data of more than 60 patent organizations. The dynamic principle is followed in CAPLUS, i.e. later publications of the same patent family are added to the same record.

The family members are displayed in the PI filed in the BIB or ALL formats:

```
L3  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2007 ACS on STN
AN  2004:24784  HCAPLUS
DN  140:67731
TI  Fluorinated polycycles and their use in liquid-crystal mixtures
IN  Wingen, Rainer; Hornung, Barbara; Schmidt, Wolfgang
PA  Clariant International Limited, Switz.
CODEN: GWXXBX
DT  Patent
LA  German
FAN.CNT 1
PATENT NO.     KIND DATE        APPLICATION NO. DATE
--------------- ----------------------- ------------------
PI  DE 10140148  A1  20030227    DE 2001-10140148  20010816 <-
US 2003072894    A1  20030417    US 2002-215247  20020808
US 6670514       B2  20031230
PRAI DE 2001-10140148  A  20010816
OS  MARPAT 140:67731
```

If the technical contents is different of in case of certain types of relations (Continuation, Continuation In Part, Division, etc.) it may be that not all family members appear in the same record in the CAPLUS database but that another or a number of records exist belonging to the same patent family. Other reasons for a family being spread over several documents are:

- Too many substances to be indexed, so that the limit for one document is exceeded
- Since 01 July, 2008 for US, DE, GB, FR, CA, EP one family document is created and indexed for the document with the oldest priority and a second document for the WO publication (WO documents often contain more information, including more chemical structures)

If this is the case, i.e. there are more records to the same family, the number in the FAN.CNT (Family accession number count) field is greater than 1. It is possible that by adding new family members documents in CAplus are re-sorted, too.

There are two ways to get these family members displayed:

- Retrieving them by using FSEARCH (always use HCAplus) and DISPLAY BIB or ALL, etc.:  
  `=> FSEARCH US2004019248/PN`  
  `=> D 1-2`

```
L11  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2007 ACS on STN FAMILY 1
AN  2004:08394  HCAPLUS
DN  140:96663
TI  Amine-initiated or alkanolamine-initiated polyoxyalkylene settling agents for petroleum recovery
IN  Stark, Joseph L.; Lauer, Robert S.; Kremer, Lawrence N.
PA  Baker Hughes Incorporated, USA
```
Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>PATENT NO.</th>
<th>KIND</th>
<th>DATE</th>
<th>APPLICATION NO.</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 2004019248</td>
<td>A1</td>
<td>20040129</td>
<td>US 2003-455847</td>
<td>20030606</td>
</tr>
<tr>
<td>US 2002002320</td>
<td>A1</td>
<td>20020103</td>
<td>US 2001-778517</td>
<td>20010206</td>
</tr>
<tr>
<td>US 2000-181242P</td>
<td>P</td>
<td>20000209</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US 2001-778517</td>
<td>A2</td>
<td>20010206</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Using the special family formats FAM, FBIB, and MAX.
- In this case the full patent family and additional information on the 'intertwining' within the families are displayed.

<table>
<thead>
<tr>
<th>PATENT NO.</th>
<th>KIND</th>
<th>DATE</th>
<th>APPLICATION NO.</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 2002002320</td>
<td>A1</td>
<td>20020103</td>
<td>US 2001-778517</td>
<td>20010206</td>
</tr>
<tr>
<td>CA 2334487</td>
<td>A1</td>
<td>20010809</td>
<td>CA 2001-2334487</td>
<td>20010207</td>
</tr>
<tr>
<td>CA 2334487</td>
<td>C</td>
<td>20010809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZA 2001001109</td>
<td>A</td>
<td>20010810</td>
<td>ZA 2001-1109</td>
<td>20010208</td>
</tr>
<tr>
<td>AU 2001018364</td>
<td>A5</td>
<td>20020725</td>
<td>AU 2001-18364</td>
<td>20010208</td>
</tr>
<tr>
<td>AU 782181</td>
<td>B2</td>
<td>20050707</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US 2004019248</td>
<td>A1</td>
<td>20040129</td>
<td>US 2003-455847</td>
<td>20030606</td>
</tr>
<tr>
<td>US 2002002320</td>
<td>A1</td>
<td>20020103</td>
<td>US 2001-778517</td>
<td>20010206</td>
</tr>
<tr>
<td>CA 2334487</td>
<td>A1</td>
<td>20010809</td>
<td>CA 2001-2334487</td>
<td>20010207</td>
</tr>
<tr>
<td>CA 2334487</td>
<td>C</td>
<td>20010809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZA 2001001109</td>
<td>A</td>
<td>20010810</td>
<td>ZA 2001-1109</td>
<td>20010208</td>
</tr>
<tr>
<td>AU 2001018364</td>
<td>A5</td>
<td>20020725</td>
<td>AU 2001-18364</td>
<td>20010208</td>
</tr>
<tr>
<td>AU 782181</td>
<td>B2</td>
<td>20050707</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

L11 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN FAMILY 1

AN 2002:11133 HCAPLUS
DN 136:72133
TI Method and block copolymer additive for settling suspended fine inorganic solid particles from hydrocarbon and crude oil slurries
IN Lauer, Robert S.; Kremer, Lawrence N.; Stark, Joseph L.
PA USA
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

<table>
<thead>
<tr>
<th>PATENT NO.</th>
<th>KIND</th>
<th>DATE</th>
<th>APPLICATION NO.</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 2004019248</td>
<td>A1</td>
<td>20040129</td>
<td>US 2003-455847</td>
<td>20030606</td>
</tr>
<tr>
<td>US 2002002320</td>
<td>A1</td>
<td>20020103</td>
<td>US 2001-778517</td>
<td>20010206</td>
</tr>
<tr>
<td>US 2000-181242P</td>
<td>P</td>
<td>20000209</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US 2001-778517</td>
<td>A2</td>
<td>20010206</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

L12 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:80394 HCAPLUS
DN 140:96663

<table>
<thead>
<tr>
<th>PATENT NO.</th>
<th>KIND</th>
<th>DATE</th>
<th>APPLICATION NO.</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 2004019248</td>
<td>A1</td>
<td>20040129</td>
<td>US 2003-455847</td>
<td>20030606</td>
</tr>
<tr>
<td>US 2000-181242P</td>
<td>P</td>
<td>20000209</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US 2001-778517</td>
<td>A2</td>
<td>20010206</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US 2002002320</td>
<td>A1</td>
<td>20020103</td>
<td>US 2001-778517</td>
<td>20010206</td>
</tr>
<tr>
<td>US 2000-181242P</td>
<td>P</td>
<td>20000209</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PATENT FAMILY INFORMATION:
FAN 2002:11133

<table>
<thead>
<tr>
<th>PATENT NO.</th>
<th>KIND</th>
<th>DATE</th>
<th>APPLICATION NO.</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 2002002320</td>
<td>A1</td>
<td>20020103</td>
<td>US 2001-778517</td>
<td>20010206</td>
</tr>
<tr>
<td>CA 2334487</td>
<td>A1</td>
<td>20010809</td>
<td>CA 2001-2334487</td>
<td>20010207</td>
</tr>
<tr>
<td>CA 2334487</td>
<td>C</td>
<td>20010809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZA 2001001109</td>
<td>A</td>
<td>20010810</td>
<td>ZA 2001-1109</td>
<td>20010208</td>
</tr>
<tr>
<td>AU 2001018364</td>
<td>A5</td>
<td>20020725</td>
<td>AU 2001-18364</td>
<td>20010208</td>
</tr>
<tr>
<td>AU 782181</td>
<td>B2</td>
<td>20050707</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US 2000-181242P</td>
<td>P</td>
<td>20000209</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US 2001-778517</td>
<td>A</td>
<td>20010206</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

298
45.5.6 Conclusion for INPADOCDB, DWPI, HCAplus

If it is vital to obtain a fully comprehensive patent family all three family data bases should be searched. Due to the different country coverage, different definitions of what a patent family is, different timeliness of patent publications being entered into the databases and different time coverage of the databases the publications considered members of a given patent family varies in the three databases.

45.6 Non-conventional patent families

A non-conventional patent family combine applications that have the same or similar technical contents but do not refer to each other. The applicant/patent assignee and inventors may be the same or different (competitors). Such similar applications may be granted if:

- There is no publication of the equivalent in any other country (unpublished applications are only relevant to novelty and only if relating to the same geographical area),
- Two or more equivalent applications are filed on the same day.

These non-conventional families can usually be found by a subject search, name search, etc.

Owing to the patent strategies of companies it may be that two equivalent applications are filed on one day. Using the internal priority e.g. one of these may be “developed further” and a search or examination request be filed for the other.

To specifically find these non-conventional families, which are not linked by common priorities it may be useful to search for applications by the applicant concerned of the same day.

Two A1 publications of the same day, but with different priorities – the documents belong to two different national families.

Whether the contents of both documents are actually the same needs to be thoroughly examined. At least the similar application should be found.
45.7 Notes on other databases

45.7.1 PATDPA

The PATDPA database contains publications of three patent organizations: DPMA, EPO, WIPO. Every application to one of these organizations (or rather the resulting first publication) triggers a new record in PATDPA to be opened and updated by the publications of the respective patent office. Thus, there may be more than one record in the database for the same patent family (for DE, EP, and WO). Additionally, all publications of the patent family are added to the family field of each record.

All documents of one patent family can be retrieved with the FSEARCH command:

```
=> FSEARCH DE 69912412/ PN
L16  3 FSO L15
   1 Multi-record Family  Answers 1-3
   0 Individual Records
   0 Non-patent Records

=> D 1-3 PA PI AI PRAI
```

The FI (Family information) field is the same in all three documents:

```
= D FI
L16 ANSWER 1 OF 3 PATDPA COPYRIGHT 2007 DPMA/FIZ KA on STN FAMILY 1 PA Siemens Information and Communication Networks Inc. (*US Boca Raton, Fla.)
FI A DE 1999-69912412 E 19990330 ADN (22) DE69912412
EP 1999-915104 AW 19990330 ADRN (86) EURO-PCT-Anm. m. DE-Ben.
R: DE ES FR GB
```

By FSEARCH also such families may be retrieved in PATDPA which are linked by:

- Applications abroad
- Multiple priorities
Types of search

- Part priorities
- Claiming an internal priority
- Addition
- Division, Continuation
- Continuation into a utility model

Here is an example of a patent family of two patents resulting from an Internal Priority being claimed:

```
=> FSEARCH DE 19941807/PN
=> D 1-2 TI PI AI PRAI FI NTE
L21 ANSWER 1 OF 2 PATDPA COPYRIGHT 2007 DPMA/FlZ KA on STN FAMILY 1
TI (U1) Golfcaddie, roboterähnlich mit elektrischem Maschinenantrieb
PI DE 29815208 U1 19990624 UGO (10) 1.Publ./DE-Kopie
AI DE 1998-29815208 U 19980825 ADU (22) DE-Gebräuchsm.-Anm.
FI FIA DE 1998-29815208 U 19980825 ADU (22) DE29815208
DE 1999-19941807 A 19990809 ADP (22) DE19941807
FIP DE 29815208 U 19990624 UGO (43) DE-Gebräuchsm.-Bekanntm.
DE 19941807 A1 20030130 AO (43) DE-Offenlegung
NTE 19980825: ADU (22) Anmeldetag der Gbm-Anm.
19980825: FPRD (32) Erstes Prioritätsdatum
19990512: UGI (47) Gebräuchsm.-Eintr. in Rolle
19990624: UGO (43) Gebräuchsm.-Bekanntmachung im Patentblatt
19990729: LUIP F422 Interesse an Lizenzvergabe erklärt (unverb.)
20010613: NPA G427 Neuer Stand Inhaber
20020124: UG6 D410 Verlängerung der Gbm-Schutzdauer auf 6 Jahre
20050609: ZT6 H433 Gbm erloschen (6 Jahre nach Anmeldung)

L21 ANSWER 2 OF 2 PATDPA COPYRIGHT 2007 DPMA/FlZ KA on STN FAMILY 1
TI (A1) Roboter-Golfcaddie
PI DE 19941807 A1 20030130 AO (10) 1.Publ./DE-Schrift
AI DE 1999-19941807 A 19990809 ADP (22) DE-Patentanmeldung
PRAI DE 1998-29815208 U1 19980825 IA IP (32) Innere Priorität (DE)
FI FIA DE 1998-29815208 U 19980825 ADU (22) DE29815208
DE 1999-19941807 A 19990809 ADP (22) DE19941807
FIP DE 29815208 U 19990624 UGO (43) DE-Gebräuchsm.-Bekanntm.
DE 19941807 A1 20030130 AO (43) DE-Offenlegung
NTE 19980825: FPRD (32) Erstes Prioritätsdatum
19990809: ADP (22) Anmeldetag der DE-Patentanhmg
20030130: AO (43) Offenlegungsdatum der DE-Anmeldung (OS)
20030410: EX (43) Prüfungsantrag gestellt
20030410: NPA G127 Neuer Stand Anmelder
```

45.7.2 IFIALL

IFIALL contains all national US publications. With every US application and every publication in the national procedure a new document is entered in this database, i.e. there may be more than one document in the database for a given application. The FI (Family Information) field contains information on all publications of the same family. The RLI (Related Applications) field holds details of other family members. Applications not claiming a foreign priority do not have data in the PRAI field. However, the PRAI field will contain details of a provisional application, if applicable. All documents belonging to one patent family can be found with FSEARCH.

In IFIALL, the “history” of a publication can be displayed in the RLI and FI fields.
FSEARCH can be used to get all family members. There are 5 documents in the family (3 applications and 2 granted patents).

FSEARCH will also bring together families in IFIALL that result from:

- Multiple priorities
- Continuation
- Continuation in Part
- Division
- Reissue

The FSEARCH command can also be used to find all publications of a national US family in the USPATALL cluster.
46 Legal status search

46.1 Introduction

46.1.1 Typical legal status searches

A legal status search may be a separate search or part of a complex patent search (e.g. infringement search, freedom to operate). Two types have to be distinguished:

- Display of the legal status for given documents found in another search (e.g. number search)
- Search for legal status entries in connection with another search (name search, subject search, classification search, etc.)

Some of the databases allow only to display the legal status, but not to search for legal status entries.

46.1.2 Legal status data

Legal status data give details on a status change in the life of an IP right. They include a date, an event (plus code) and details or additional information:

PI DE 19964362 B4 20100617
20110120 DE8339 CEASED/NON-PAYMENT OF THE ANNUAL FEE
NIF Lapses, Expiries, Withdrawals, Refusals
..................................................20110120

46.1.3 Typical queries

- Search by legal or procedure status or display of the legal or procedure status:
  - Has an examination request been filed?
  - Is the application still under examination? Has it been rejected or allowed?
  - In which countries is there an active patent protection?
  - Has anyone filed an opposition or a nullity action?
    Possibly display of the opponent(s)
  - Has the opposition procedure been closed?
  - Have all annual fees been paid?
  - Has the term of protection been extended over the normal 20 years through a Supplementary Protection Certificate (SPC)?

- Search (display) of declaration of willingness to licence or licensee

- Search (display) of change of ownership

- Search (display) of lapsed patents in order to be able to use the technology (only 10% of all patent literature is actually protected)

46.2 Databases with legal status data

Legal status data are regularly entered and updated in these databases:

INPADOCDB/INPAFAMDB


Entry of PCT applications into the national phase:

Non-entry of PCT applications into the national phase: CA, DE, JP, KR
European applications: application and grant are through the EPO, in some countries the patent offices assign national application numbers/publication numbers:

Countries where national application/publication numbers are assigned:
AT, CY, DE, ES, HR, IE, SM

Note in the EP legal status “Corresponds To”, “Entry Into National Phase” or reference to payment of annual fees: AT, BE, BG, CH, CZ, CY, DE, DK, EE, ES, FI, FR, GB, GR, HK, HU, IE, IL, IT, LI, LT, LU, LV, MC, MD, NL, PL, PT, RO, RU, SE, SI, SK, TR

SPCs (Supplementary Protection Certificates): AT, DE, ES, FI, FR, IT, LT, LU, NL, SK

Extension of term (patents and utility models):
AT, AU, CH, CN, CZ, DE, DK, FI, FR, GB, HU, IE, IL, J P, LT, NL, NO, RU, SE, SK, US

The start date varies with the country; more countries are constantly added.


Legal status data in original language

PATDPA German and European patents (DE, EP), (no more updates from 7/2011)

PATDPASPC SPCs (Supplementary Protection Certificates): DE

IFICLS Legal status of US patents including Reassigned Patents, Reexamined Patents, Expired Patents, Reinstated Patents, Certificates of Correction, Adverse Decision in Interference, Disclaimer/Dedication, Reexamination Request, Reissue Request

EPFULL Legal status from INPADOCDB and searchable legal status from the European Patent Register

FRANCEPAT French patents and utility models (no updates from 11/2009)

RUSSIAPAT Publication data of earlier publications in the national patent procedure for Russian patents, entry of PCT applications into the national phase and the priority date

IMSPATENTS Pharmaceutical patents and patent families from 90 countries:
Current information on protection and expiry dates, comments on each individual patent, on other patents of the respective technical patent family and on other patent families relevant for the substance indexed, including Supplementary Protection Certificates and Pediatric Extensions

LITALERT Lawsuits on US Patents and US Trademarks

The INPADOCDB legal status can be displayed in other databases: AUPATFULL, CANPATFULL, CNFULL, DEFULL, DGENE, EPFULL, FRFULL, GBFULL, JPFULL, PATDPAFULL, PCTFULL, USGENE.

In all these databases, no responsibility is accepted for the correctness of the legal status information. Correct information can be obtained by inspection of the files of the respective patent office.

Still, databases with legal status information have some advantages compared to the national registers:

- Legal status information from multiple countries can be displayed in the international databases. The information can be displayed in chronological order and in compact form for the whole patent family.
- Extensive search options are available to find documents containing certain legal status information, e.g.:
  - Search for active patents of a company or in a technology field
  - Search for lapsed patents of a company or in a technology field
  - Search for patents that were opposed
  - Search for opponents of European patents (partly also AU, BR, FI, GB, NL, NO, PT)
  - Statistics of opponents
Types of search

- Search for patents offered for licensing
- Search for SPCs
- Display of expiration dates of IP rights in 30 countries
- Monitoring of legal status events

### 46.3 INPADOCDB/INPAFAMDB

INPADOCDB holds legal status information of currently 61 countries (constantly being extended). The description below refers to INPADOCDB, but legal status display is done the same way in INPAFAMDB. The display formats for legal status in INPAFAMDB (LS, MAX, etc.) are all de-duplicated.

The legal status can be displayed with the formats LS or LS2 (LSUP with SDI):

```plaintext
<table>
<thead>
<tr>
<th>LS</th>
<th>LS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>=&gt; D LS</td>
<td></td>
</tr>
</tbody>
</table>

LEGAL STATUS

AN 23989135 INPADOCDB
20010929 EPA PRI Patent application
EP 2001-123512 A 20010929
20010929 EPA APP Patent application
EP 2001-123512 A 20010929
20030402 EPA PUB APPLICATION PUBLISHED WITH SEARCH REPORT
EP 1297908 A1 20030402
20030402 EPAP + DESIGNATED CONTRACTING STATES:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
20030402 EPAP + DESIGNATED CONTRACTING STATES:
EP A1
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
20030402 EXAPE + EXTENSION OF THE EUROPEAN PATENT TO
AL LT LV MK RO SI
20030402 EPIJP + REQUEST FOR EXAMINATION FILED
20010929
20040102 EPPX + PAYMENT OF DESIGNATION FEES
DE ES FR GB IT
20040225 EPRB1 PUB PATENT SPECIFICATION
EP 1297908 B1 20040225
20040225 EPAP + DESIGNATED CONTRACTING STATES:
EP B1
DE ES FR GB IT
20040225 EPREG GBFG4D + GB: EUROPEAN PATENT GRANTED
NOT ENGLISH
20040322 EPREG IEG4D + IE: EUROPEAN PATENTS GRANTED DESIGNATING IRELAND GERMAN
20040401 EPREF CORRESPONDS TO:
DE 50101564 P 20040401
20040512 EPGBT + GB: TRANSLATION OF EP PATENT FILED (GB SECTION 77(6)(A)/1977)
20030401
20040716 EPREG REFERENCE TO A NATIONAL CODE
ESFG2A ES: DEFINITIVE PROTECTION
ES 2211712 T3
20040922 EPREG IEFAD + IE: EUROPEAN PATENTS DESIGNATING IRELAND TREATED AS
ALWAYS HAVING BEEN VOID
20041029 EPER + FR: TRANSLATION FILED
20050119 EP26 + OPPOSITION FILED
SMS DEMAG AG
20041124 |

| => D LS |

LEGAL STATUS

AN 23989135 INPADOCDB
20010929 EPA PRI Patent application
EP 2001-123512 A 20010929
20010929 EPA APP Patent application
EP 2001-123512 A 20010929
20030402 EPA PUB APPLICATION PUBLISHED WITH SEARCH REPORT
EP 1297908 A1 20030402
20030402 EPAP + DESIGNATED CONTRACTING STATES:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
20030402 EPAP + DESIGNATED CONTRACTING STATES:
EP A1
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
20030402 EXAPE + EXTENSION OF THE EUROPEAN PATENT TO
AL LT LV MK RO SI
20030402 EPIJP + REQUEST FOR EXAMINATION FILED
20010929
20040102 EPPX + PAYMENT OF DESIGNATION FEES
DE ES FR GB IT
20040225 EPRB1 PUB PATENT SPECIFICATION
EP 1297908 B1 20040225
20040225 EPAP + DESIGNATED CONTRACTING STATES:
EP B1
DE ES FR GB IT
20040225 EPREG GBFG4D + GB: EUROPEAN PATENT GRANTED
NOT ENGLISH
20040322 EPREG IEG4D + IE: EUROPEAN PATENTS GRANTED DESIGNATING IRELAND GERMAN
20040401 EPREF CORRESPONDS TO:
DE 50101564 P 20040401
20040512 EPGBT + GB: TRANSLATION OF EP PATENT FILED (GB SECTION 77(6)(A)/1977)
20030401
20040716 EPREG REFERENCE TO A NATIONAL CODE
ESFG2A ES: DEFINITIVE PROTECTION
ES 2211712 T3
20040922 EPREG IEFAD + IE: EUROPEAN PATENTS DESIGNATING IRELAND TREATED AS
ALWAYS HAVING BEEN VOID
20041029 EPER + FR: TRANSLATION FILED
20050119 EP26 + OPPOSITION FILED
SMS DEMAG AG
20041124 |
Guide to STN Patent Databases

ORE Opposition, Reexamination

20070221 EP270 + OPPOSITION REJECTED 20061015

20101029 EPPGFP + POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE ES: 20100916 Payment Year: 10

20101130 EPPGFP + POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE FR: 20100914 Payment Year: 10

20101231 EPPGFP + POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE GB: 20100929 Payment Year: 10

In LSO, the legal status can be displayed in original language, e.g. DE, FR, ES NL:

In LSO, the legal status can be displayed in original language, e.g. DE, FR, ES NL:

=> D BIB LSO

AN 53298503 INPADOCDB ED 20070614 EW 200724 UP 20111007 UW 201140

TI Abgabevorrichtung zur Abgabe von Wirkstofffluiden in die Spuelfluessigkeit in einem Toilettenbecken.

INS BUTTER JENTSCH RALPH, DE; MENKE RONALD, DE; MUEHLHAUSEN HANS GEORG, DE; PESSEL FRANK, DE; JUNGMANN THOMAS, DE; HUCHLER STEFAN, DE

PAS HENKEL KGAA, DE

PI DE 10164866 B4 20070614

LEGAL STATUS

AN 53298503 INPADOCDB

20040923 DEQ172 AUSGESCHIEDEN ODER ABGETEILT VON (NACHTRAG): DE 101113036 P 20110811

20040930 DE8110 + EINGANG VON PRUEFUNGSANTRAEGEN PAR. 44 EXA Examination, Search Report

20070614 DEB4 PUB PATENT (SECOND PUBLICATION) DE 10164866 B4 20070614

20070614 DEAC AUSSCHEIDUNG AUS DE 101113036 P

20071206 DE8364 + EINSPRUCHSFRIEST ABGELAUFEN OHNE DASS EINSPRUCH ERHOBEN WURDE

20080605 DE8310 + KLAGE AUF ERKLAERUNG DER NICHTIGKEIT ERHOBEN

20080724 DE8327 AENDERUNG IN PERSON, NAMEN ODER WOHNORT DES PATENTINHABERS HENKEL AG & CO. KGAA, 40589 DUESSELDORF, DE

CHG Change of Owner, Inventor, Applicant

20090108 DE8313 + ANTRAG AUF ERKENNUNG DER NICHTIGKEIT ZURUCKGEWESSEN/ GEZOGEN

When the legal status is displayed using the formats LS or LS2 (LSUP with an SDI) the respective priority, application, and publication details are displayed (not with the formats MAX, FFAM, etc.). Element Billing is used, i.e. the
Types of search

Bibliographical details are billed only if they are displayed with the legal status only. If the legal status is displayed in addition to the bibliographical details and there is no additional legal information only the BIB format will be billed.

20010929 EPA PRI Patent application
EP 2001-123512 A 20010929
20010929 EPA APP Patent application
EP 2001-123512 A 20010929
20030402 EPA1 PUB Application Published With Search Report
EP 1297908 A1 20030402

The information is formatted like this:

<table>
<thead>
<tr>
<th>Date</th>
<th>Code</th>
<th>Legal status code</th>
<th>Legal status code text</th>
<th>Legal status code in force</th>
<th>Legal status categories, grouping all codes of a particular category</th>
<th>Date of entry into the database (since Apr. 2007, reload of INPADOCDB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20050119</td>
<td>EP26</td>
<td>OPPOSITION FILED</td>
<td>SMS DEMAG AG</td>
<td></td>
<td>OPPOSITION</td>
<td>20061015</td>
</tr>
<tr>
<td>20070221</td>
<td>EP270</td>
<td></td>
<td>OPPOSITION, Reexamination</td>
<td>+ OPPOSITION REJECTED</td>
<td></td>
<td>20070222</td>
</tr>
</tbody>
</table>

The family formats, FFAM, LFAM and IFAM, include the legal status, too.

In the INPAFAMDB database all legal status details of a complete patent family can be displayed in chronological order.

On the server of the European Patent Office (http://www.epo.org/searching/data/data/tables.html) there are tables available detailing:

- Contents and coverage of the INPADOC legal status file
- Classification of recently used PRS codes
- Description of legal status codes: AU, DE, EP, GB, NZ, US
Guide to STN Patent Databases

A table containing all legal status codes in original language is available on:

- http://documents.epo.org/projects/babylon/rawdata.nsf/0/8A0E71AB90C1C4A6C12579EC002E26D0/$File/le-codes-or1217.txt

There are a number of search fields available. EXPAND is recommended to browse the codes and code description text:

=> E EP/LSC

...  
E4  254  EP110E/LSC
E5  254  EP110E REQUEST FOR CONVERSION/LSC
E6  1634  EP111L/LSC
E7  1634  EP111L LICENSES/LSC
E8  1200  EP111Z/LSC
E9  1200  EP111Z LEGAL MEANS OF EXECUTION/LSC
E10 068  EP16A/LSC
E11 068  EP16A NEW DOCUMENTS DISCOVERED AFTER COMPLETION OF TH/LSC
E12 3  EP17A/LSC
...

=> E OPPOSITION/LSTX

E1 1 OPPONENT/LSTX
E2 104 OPPOS/LSTX
E3 1865062 OPPPOSITION/LSTX
E4 97 OPPOSITIONS/LSTX
E5 1 OPPOSTION/LSTX
...

These fields are available:

<table>
<thead>
<tr>
<th>DISPLAY field in format LS</th>
<th>DISPLAY header in format LS2</th>
<th>SEARCH field</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSUP</td>
<td>UPLS</td>
<td>Legal Status Update Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EWLS</td>
<td>Legal Status Entry Week (INPADOC-Woche)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EDLS</td>
<td>Legal Status Entry Date (ED + UPLS)</td>
<td></td>
</tr>
<tr>
<td>LS</td>
<td>LSCY</td>
<td>Legal Status Country</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSCC</td>
<td>Legal Status Code Country</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSC</td>
<td>Legal Status Code + Text</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSC2</td>
<td>Legal Status Code Category</td>
<td></td>
</tr>
<tr>
<td>LSTX *)</td>
<td>LSTX *)</td>
<td>Text of LSC *)</td>
<td></td>
</tr>
<tr>
<td>LSD</td>
<td>LSD</td>
<td>Legal Status Date INPADOC GAZETTE</td>
<td></td>
</tr>
<tr>
<td>LSCI</td>
<td>LSCI</td>
<td>Legal Status Indicator (negative/positive)</td>
<td></td>
</tr>
<tr>
<td>LSDF</td>
<td>LSDF</td>
<td>Legal Status Date in Force</td>
<td></td>
</tr>
<tr>
<td>LSFT</td>
<td>LSFT</td>
<td>Legal Status Free Format Text</td>
<td></td>
</tr>
<tr>
<td>LSP1</td>
<td>LSPC</td>
<td>Legal Status Publication Country</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSPD</td>
<td>Legal Status Publication Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSPK</td>
<td>Legal Status Publication Kind Code</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSPN</td>
<td>Legal Status Publication Number</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSPY</td>
<td>Legal Status Publication Year</td>
<td></td>
</tr>
<tr>
<td>LDS</td>
<td>LDS</td>
<td>Legal Status Designated States</td>
<td></td>
</tr>
<tr>
<td>LSAG</td>
<td>LSAG</td>
<td>Legal Status Representative/Agent</td>
<td></td>
</tr>
<tr>
<td>LSIN</td>
<td>LSIN</td>
<td>Legal Status Patent Inventor</td>
<td></td>
</tr>
<tr>
<td>LSOP</td>
<td>LSOP</td>
<td>Legal Status Patent Opponent</td>
<td></td>
</tr>
<tr>
<td>LSPA</td>
<td>LSPA</td>
<td>Legal Status Patent Assignee</td>
<td></td>
</tr>
<tr>
<td>LSSPC</td>
<td>LSSPC</td>
<td>Legal Status SPC Number</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSSPC.EX</td>
<td>Legal Status SPC: Extension Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSSPC.FD</td>
<td>Legal Status SPC: Filing Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSSPC.XD</td>
<td>Legal Status SPC: Expiry Date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LSIC</td>
<td>Legal Status IPC</td>
<td></td>
</tr>
</tbody>
</table>

*LSTX contains only the description of LSC

**Note:** The fields are filled only if the respective data are provided by the patent office, e.g. the fields LSSPC.EX, LSSPC.FD, LSSPC.XD are not available for German SPCs.
Guide to STN Patent Databases

20030305 EPREG REFERENCE TO A NATIONAL CODE
GBCTFG GB: CERTIFICATE GRANTED
SPC/GB02/021
20030210 20140226

LSSPC
LSSPC.XD
LSSPC.FD

20030305 EPREG REFERENCE TO A NATIONAL CODE
GBCTFG GB: CERTIFICATE GRANTED
SPC/GB02/021
20030210 20140226

LSSPC
LSSPC.XD
LSSPC.FD

20030515 EPREG REFERENCE TO A NATIONAL CODE
CHNV CH: NEW AGENT
BOVARD AG PATENTANWELTE

LSAG

20030402 EPRIC1 CLASSIFICATION (CORRECTION)
7A 01B 71/06 B

LSIC

20030730 EPAK + DESIGNATED CONTRACTING STATES:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE TR
200718..........................20070505

EWLS
UPLS

Display HIT:
LEGAL STATUS HIT
AN 24006039 INPADOCDB
20031121 US356 + PATENT TERM EXTENSION UNDER 35 U.S.C. 156
PRODUCT NAME: REGRANEX AND BECAPLERMIN CONCENTRATE
20060704 20101029

LSSPC.EX

Display LS2:
AN 24006039 INPADOCDB UPLS 20040722 EWLS 200430
LSD 20031121
LSC US356
LSCI + (positive)
LSTX PATENT TERM EXTENSION UNDER 35 U.S.C. 156
LSFT PRODUCT NAME: REGRANEX AND BECAPLERMIN CONCENTRATE
.XD 20060704
.EX 20101029
### 46.3.1 Notes on /UPLS and /EDLS

The /UPLS field indicates when a certain event was entered in the legal status field (from April 2007).

For monitoring certain important events in patent procedures it was necessary to introduce a new update field, /EDLS. This field indicates both changes in the bibliographic levels (/ED) and in the legal status data (/UPLS):

\[
\text{EDLS} := \text{ED} + \text{UPLS}
\]

It is planned to include certain publication information (e.g. grant) in the legal status again.

### 46.3.2 Notes on /LSFT and /LSBI

A field /LSFT (Legal Status Free Text) was introduced, because in the back-file in some cases the legal status information was not assigned to a specific field, e.g. /LSPA. To get all information the search should be made in /LSFT + /LSPA, /LSIN, /LSOP, /LSAG or even in /LSBI (Legal Status Basic Index):

\[
\text{LSBI} := \text{LSAG}, \text{LSFT}, \text{LSIN}, \text{LSOP}, \text{LSA}
\]

### 46.3.3 Search in the legal status fields

The information in the legal status fields is word indexed. (W) is used as implied proximity; the other proximity operators may also be used in these fields (LSTX contains only the description for LSC). The Boolean operators include all legal status information in LS and/or LS2. To link two terms from the same entry (L) proximity should be used:

\[
=> S \text{ DEOP8/LSC(L) 20110526/UPLS}
\]

\[
471360 \text{ DEOP8/LSC 77012 20110526/UPLS (20110526/UPLS)}
\]

\[
L4 \quad 403 \text{ DEOP8/LSC(L) 20110526/UPLS}
\]

\[
=> D \text{ HIT}
\]

\[
L4 \quad \text{ANSWER 1 OF 403 INPADOCDB COPYRIGHT 2011 EPO/FIZ KA on STN}
\]

\[
\text{LEGAL STATUS HIT AN 64910509 INPADOCDB 20110526 DEOP8 + REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW EXA Examination, Search Report .......................................................... 20110526}
\]

UPLS is also range searchable:

\[
=> S \text{ EPPG25/LSC (L) 20110101-20110215/UPLS}
\]

\[
896976 \text{ EPPG25/LSC 685967 20110101-20110215/UPLS (20110101-20110215/UPLS)}
\]

\[
L5 \quad 66822 \text{ EPPG25/LSC (L) 20110101-20110215/UPLS}
\]

With DISPLAY HIT only those legal status entries will be displayed which were entered or updated during the period specified:

\[
=> D \text{ HIT 1 60000}
\]

\[
L5 \quad \text{ANSWER 1 OF 66822 INPADOCDB COPYRIGHT 2011 EPO/FIZ KA on STN}
\]

\[
\text{LEGAL STATUS HIT AN 63742922 INPADOCDB 20041110 EPPG25 - Lapsed in a contracting state announced via postgrant inform. from nat. office to EPO lapse because of failure to submit a translation of the description or to pay the fee within the prescribed time limit at: 20041110 NIF Lapses, Expiries, Withdrawals, Refusals .......................................................... 20110203}
\]

...
When searching in the LSTX field (S) proximity should be used to link the search terms:

=> S BAYER/PA, PAS AND (EXPIR?(S) FAIL?)/LSTX
199972 BAYER/PA
202142 BAYER/PAS
1890718 EXPIR?/LSTX
1103205 FAIL?/LSTX
919716 (EXPIR?(S) FAIL?)/LSTX

L2 5417 BAYER/PA, PAS AND (EXPIR?(S) FAIL?)/LSTX

=> D HIT 2

L6 ANSWER 2 OF 6510 INPADOCDB COPYRIGHT 2011 EPO/FIZ KA on STN
PA BAYER AKTIENGESELLSCHAFT
PAS BAYER AG, DE

LEGAL STATUS HIT AN 52840545 INPADOCDB
20110503 USFP - EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE
20110313
NIF Lapses, Expiries, Withdrawals, Refusals
..........................................................20110505

Note: The INPADOCDB database was reloaded in spring 2007. All documents existing in the database at that time have the same (or a similar) entry date (e.g. Entry Date field). If you want to link legal status information from that time (or before) with a date do not use the database entry/update date (e.g. Entry Date /ED) but rather a date from the document (e.g. Publication Date /PD).

46.3.3.1 Legal status categories

With over 2,600 legal status codes, legal status searches using these codes can be a challenge even for an experienced searcher. The codes vary between patent offices and even the description text may change over time. Therefore, to successfully complete a comprehensive search a detailed knowledge of the various patent examination procedures is indispensable.

In order to better help searchers legal status categories were introduced that group all codes on a particular theme. These seven category codes cover the most needed fields.

The category codes are searched in the /LSC2 search field:

- **CHG** Change of Owner, Inventor, Applicant
- **EXA** Examination, Search Report
- **LIC** Licensing
- **NIF** Lapses, Expiries, Withdrawals, Refusals
- **ORE** Opposition, Reexamination
- **REI** Reinstatement or Restoration
- **SPC** Supplementary Protection Certificate, Time Extension

=> S SYNGENTA/PA, PAS AND NIF/LSC2
11409 SYNGENTA/PA
11430 SYNGENTA/PAS
11816835 NIF/LSC2

L7 2893 SYNGENTA/PA, PAS AND NIF/LSC
The advantage of the legal status categories lies in the easy access to specific legal status information. They are:

- Reliable and easy to use,
- Well suited for specific needs of legal status monitoring,
- Current, as new codes and code definitions are constantly updated.

Anyway, note that the legal status categories are no more than a convenient summary of existing legal status code entries. Always consider these additional notes (see also the “Monitoring” search example):

- NIF in EP or WO applications does not mean that all Designated States are concerned
- Lapse of a patent or application (denoted by NIF) can be reversed by a later event (e.g. reinstatement or Supplementary Protection Certificate, SPC)
- ORE does not include NO OPPOSITION
- SPC not only covers Supplementary Protection Certificates but also all other extensions of the term of an IP right (including e.g. renewal of utility models)

### 46.3.4 Calculated expiration dates

To identify active or expired patents the expiration dates of granted patents of important patent offices (from 30 countries) from 1980 are calculated and displayed: AR, AT, AU, BE, BR, CA, CH, CN, DE, DK, EP, ES, FI, FR, GB, HK, HK, IE, IL, IT, JP, KR, MX, NL, PL, RU, SE, SU, TW, US, ZA

This information is typically not available from the legal status as most patents do not expire at the end of their theoretical term but, for a variety of reasons, at an earlier time (average effective term: 12 years).
For the calculation of the expiration dates it is not enough to consider the usual 20-year patent term but approximately 400 rules must be considered for the 30 countries, in particular:

- Patent laws and changes to patent laws for all granted patent rights since 1980 (patents, utility models, design patents, plant patents, all publication types, such as short term patents, re-examination, reissue, etc.)
- Determination of the first effective application date (the first priority date in a chain of priority dates, important in particular for Divisional Patents and Continuations-in-Part)

The calculation is based on the bibliographical details in INPADOC (publication, application and priority dates). Data that are not taken into account:

- Patent Term Adjustments (PTA), e.g. for US patents
- Expiration dates from the legal status data in INPADOC (e.g. expired for non-payment of maintenance fees)
- Calculated expiration dates of SPC (Supplementary Protection Certificates)

For searching the fields XPD (Expiration Date) and XPY (Expiration Year) are available:

```plaintext
=> S 20130120/XPD
=> S 20140601-2015-0601/XPD
=> S XPD>20140101
=> S 2014-2017/XPD
```

The PATDPA database is no longer updated from 7/2011, i.e. also legal status information is no longer updated. PATDPA contains legal status information of German patent publications since 1981 and of European patent publications since 1998 in the NTE field. (The legal status on EP publications before this date concerns the designations in German only.) The legal status information of EP publications also contains data from the national phase of the designated states. The legal status is part of e.g. the NTE, ALL, and MAX formats.

```
PI   DE 19999754      C2 20011011 PG   OP3 (10) letzte Publ./DE-Schrift
AI DE 1999-19959754 A 19991211 ADP   (22) DE-Patentanmeldung
FI FIA DE 1999-19959754 A 19991211 ADP (22) DE19959754
FIP DE 19959754 A1 200010621 AO (43) DE-Offenlegung
DE 19959754 C2 20011011 PG (45) DE-Patenterteilung
NTE 19991211: ADP (22) Anmeldetag d. DE-Patentanmeld.
200010621: AO (43) Offenlegungstag der DE-Anmeldung (OS)
20011011: EX (43) Pruefungsantrag gestellt
20011011: PG (45) Veroeff.-Tag der DE-Patenteilung
20011011: SRP (56) Veroeff. d. Entgegenseitigkeiten auf DE-PS
```

**46.4 PATDPA**

The PATDPA database is no longer updated from 7/2011, i.e. also legal status information is no longer updated.

PATDPA contains legal status information of German patent publications since 1981 and of European patent publications since 1998 in the NTE field. (The legal status on EP publications before this date concerns the designations in German only.) The legal status information of EP publications also contains data from the national phase of the designated states. The legal status is part of e.g. the NTE, ALL, and MAX formats.
Types of search

<table>
<thead>
<tr>
<th>Date</th>
<th>Code</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>20020117</td>
<td>LIBP</td>
<td>F320 Lizenzbereitschaft erklärt (verbindlich)</td>
</tr>
<tr>
<td>20020411</td>
<td>PGE0</td>
<td>I364 Einspruchfrist abgelaufen ohne Einspruch</td>
</tr>
<tr>
<td>20031009</td>
<td>ZEJP</td>
<td>H339 Erledigt wegen Nichtzahlg. d. Jahresgebühr</td>
</tr>
</tbody>
</table>

The legal status is always with regard to the patent publication shown in the PI field. The information given is this:

<table>
<thead>
<tr>
<th>Date</th>
<th>Code</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>20031009</td>
<td>ZEJP</td>
<td>H339 Erledigt wegen Nichtzahlg. d. Jahresgebühr</td>
</tr>
</tbody>
</table>

- DE A/B/C – Publication date in the Patent gazette
- DE U0 – Date of entry in the register
- DE U1 – Publication date in the Patent gazette
- EP – Effective date
- WO – Effective date

The legal status code can be searched in the /NTE field:

=> S LIBP/NTE

To see which codes there are for a particular legal status matter EXPAND can be used:

=> E L/NTE 22

Legal status code
INID code
Legal status text

- DE A/B/C – Publication date in the Patent gazette
- DE U0 – Date of entry in the register
- DE U1 – Publication date in the Patent gazette
- EP – Effective date
- WO – Effective date

46.4.1 Supplementary Protection Certificates

Supplementary Protection Certificates can so far only be displayed. In the /FA field one can find if a certificate was applied for or granted:

=> S SPC/FA
L39 983 SPC/FA

=> D SPC
L39 ANSWER 1 OF 983 PATOPA COPYRIGHT 2004 DPMA/FIZ KA on STN
SPC Arzneimittel Zertifikat Anmeldung
DE10399018.6 20031023 (DE69720320)
F. Hoffmann-La Roche AG, Grenzacherstr. 124, 4070 Basel, CH
BGA: EU/1/02/221/001 20.06.2002
EU/1/02/221/002 20.06.2002
EU/1/02/221/003 20.06.2002
EU/1/02/221/004 20.06.2002
EU/1/02/221/005 20.06.2002
EU/1/02/221/006 20.06.2002
EU/1/02/221/007 20.06.2002
EU/1/02/221/008 20.06.2002
46.5 PATDPASPC

PATDPASPC contains details on granted, rejected and withdrawn protection certificates for German drugs and plant protection agents (SPC). All details on the chemical compounds, the certificates and the legal status are searchable (SPC document number, publication and application details of the respective patent, SPC product type, SPC term, SPC application and grant details, chemical names, CAS Registry numbers of the substance and related substances, trade names, legal status notes, IPC main class).

=> S DE 19775049/SPC.DN AND ERLOSCHEN/NTE
   1 DE 19775049/SPC.DN
   (DE19775049/SPC.DN)
   16 ERLOSCHEN/NTE
L1  1 DE 19775049/SPC.DN AND ERLOSCHEN/NTE

=> D SPC LS

L1  ANSWER 1 OF 1 PATDPASPC COPYRIGHT 2011 DPMA/FIZ KA on STN

SPC.DN  DE 19775049
SPC.TYP  plant protection
SPC.GD   20010511
SPC.AD   19970731

LS
APP  Fenbuconazol mit Fenpropimorph
REQ  Fenbuconazol
GRA  Fenbuconazol; alle Formen
NTE  erloschen (Nichtzahlung der Jahresgeb.)

The update of the database is irregular. With the update new documents for SPCs will be recorded and already existing updated. In the file banner of the database is shown if a new update took place.

46.6 EPFULL

In EPFULL current legal status data from INPADOCDB are added. This way the data available include data after granting and the entry into the national phase. The legal status data can be displayed by LS and LS2 as in INPADOCDB but they are not searchable.

In addition searchable legal status information from the European Bulletin is added to the database: this information can be displayed with the LSEP field. With the LSEPR display field a PDF link to the European Patent Register (updated daily, some additional information) is additionally displayed. Once displayed, the link will be accessible in the session transcript for 90 days and will present the data at the time when the command was initiated. For updating, display LSEPR needs to be used again.

<table>
<thead>
<tr>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>/OP</td>
<td>OP</td>
<td>Opponent Name</td>
</tr>
<tr>
<td>/OP.CNY</td>
<td></td>
<td>Opponent, Country, WIPO code+text</td>
</tr>
<tr>
<td>/OP.CTY</td>
<td></td>
<td>Opponent, City</td>
</tr>
<tr>
<td>/OP.STR</td>
<td></td>
<td>Opponent, Street</td>
</tr>
<tr>
<td>/OPA</td>
<td></td>
<td>Opponent Assignee (complete information)</td>
</tr>
<tr>
<td>/OPAO</td>
<td></td>
<td>Opponent Assignee (complete information), old</td>
</tr>
<tr>
<td>/OPAG</td>
<td></td>
<td>Opponent Agent</td>
</tr>
<tr>
<td>/OPAGA</td>
<td></td>
<td>Opponent Agent, Address</td>
</tr>
<tr>
<td>/OPAGAO</td>
<td></td>
<td>Opponent Agent, Address old</td>
</tr>
<tr>
<td>/OPAGN</td>
<td></td>
<td>Opponent Agent, Number</td>
</tr>
<tr>
<td>/OP.RD</td>
<td></td>
<td>Opposition, Date of the Rejection</td>
</tr>
<tr>
<td>/OP.TD</td>
<td></td>
<td>Opposition, Date of Termination</td>
</tr>
<tr>
<td>/OPD</td>
<td></td>
<td>Opposition Date</td>
</tr>
<tr>
<td>/OPK</td>
<td></td>
<td>Opposition Kind</td>
</tr>
<tr>
<td>/OPN</td>
<td></td>
<td>Opposition Number</td>
</tr>
</tbody>
</table>
### Types of search

<table>
<thead>
<tr>
<th>SEARCH</th>
<th>DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>/LSC</td>
<td>LSEP, LSEP.M</td>
</tr>
<tr>
<td>/LSD</td>
<td>Legal Status Code (code and text)</td>
</tr>
<tr>
<td>/LSDF</td>
<td>Legal Status Publication Date</td>
</tr>
<tr>
<td>/LSCY</td>
<td>Legal Status Date in Force</td>
</tr>
<tr>
<td>/LSPY</td>
<td>Legal Status Country, WIPO code+text</td>
</tr>
<tr>
<td>/LSTX</td>
<td>Legal Status Publication Year</td>
</tr>
<tr>
<td>/LI</td>
<td>Legal Status Code Text</td>
</tr>
<tr>
<td>/LICNY</td>
<td>Licensee Name</td>
</tr>
<tr>
<td>/LICTY</td>
<td>Licensee Address, Country, WIPO code+text</td>
</tr>
<tr>
<td>/LISTR</td>
<td>Licensee Address, City</td>
</tr>
<tr>
<td>/LIA</td>
<td>Licensee Address, Street</td>
</tr>
<tr>
<td>/LIAO</td>
<td>Licensee Address, old</td>
</tr>
<tr>
<td>/LID</td>
<td>Licensee Address</td>
</tr>
<tr>
<td>/LIDS</td>
<td>Licensee Date</td>
</tr>
<tr>
<td>/LIK</td>
<td>Licensee Designated States (WIPO code+text)</td>
</tr>
<tr>
<td>/LIN</td>
<td>Licensee Kind</td>
</tr>
<tr>
<td>/LNP</td>
<td>Licensee EPO Number</td>
</tr>
</tbody>
</table>

To find out what licenses an institution has granted one could use this search strategy:

```plaintext
=> S (EIDGENOESSISCH (S) TECHNISCHE (S) HOCHSCHULE (S) ZUERICH) / PA AND EPB790 / LSC
L1 5 (EIDGENOESSISCH (S) TECHNISCHE (S) HOCHSCHULE (S) ZUERICH) / PA AND EPB790 / LSC

=> D TI PA AG PI DS AI PRAI LSEP
L1  ANSWER 1 OF 5   EPFULL COPYRIGHT 2011 EPO/FIZ KA/LNU on STN
TIE N Scaffolds for artificial heart valves and vascular structures.
TIDE Geruest fuer kuenstliche Herzklappenprothese und Gefaess-Strukturen.
PA Eidgenoessische Technische Hochschule Zuerich, Raemistrasse 101, 8092 Zuerich, CH
AG Schaad, Balass, Menzl & Partner AG, Dufourstrasse 101 Postfach, 8034 Zuerich, CH
PI EP 1864687   A1  20071212
DS AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
AI EP 2006-11911   A  20060609
PRAI EP 2006-11911   A  20060609 *

LEGAL STATUS INCLUDING HISTORY
AN  2006;172417 EPFULL
20071212 EPB430  Unexamined document without grant, (first publication)  20071212
20071212 EPB840  Designated contracting states AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
EP 1864687   A1  20071212
20071212 EPB844 EP Extension of the European patent to AL BA HR MK YU
...........................................20071212
20080723 EPB241  Request for examination  20080609
...........................................20080725
20080813 EPB242  Dispatch of the first examination report  20080710
...........................................20080813
20080820 EPB840 N Payment of designation fees AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
...........................................20080820
20080820 EPB844EPN Payment of extension fees
...........................................20080820
20090603 EPB790  License  20090330
AB Medica S.p.A.
```

317
46.7 FRANCEPAT

46.7.1 Legal Status Information

The FRANCEPAT database is no longer updated from 11/2009, i.e. also legal status information is no longer updated.

<table>
<thead>
<tr>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>/LS</td>
<td>LS</td>
<td>Legal Status</td>
</tr>
<tr>
<td>/LS.LD</td>
<td></td>
<td>Legal Status, Date of Lapse</td>
</tr>
<tr>
<td>/LS.NPD</td>
<td></td>
<td>Legal Status, National Patent Register Date</td>
</tr>
<tr>
<td>/LS.NPR</td>
<td></td>
<td>Legal Status, National Patent Register</td>
</tr>
<tr>
<td>/LS.GD</td>
<td></td>
<td>Legal Status, Date of Grant</td>
</tr>
<tr>
<td>/LS.GB</td>
<td></td>
<td>Legal Status, Grant BOPI Number</td>
</tr>
<tr>
<td>/LS.RD</td>
<td></td>
<td>Legal Status, Rejection or Withdrawal Date</td>
</tr>
<tr>
<td>/LS.SD</td>
<td></td>
<td>Legal Status, Date of Supplementary Search Report</td>
</tr>
<tr>
<td>/LI</td>
<td>LI</td>
<td>Licensee (Name and Address)</td>
</tr>
<tr>
<td>/LIA</td>
<td></td>
<td>Licensee (Address)</td>
</tr>
<tr>
<td>/LINM</td>
<td></td>
<td>Licensee (Name)</td>
</tr>
<tr>
<td>/LIT</td>
<td></td>
<td>Licensee (Type)</td>
</tr>
</tbody>
</table>

In FRANCEPAT the legal status field is subdivided into a number of search fields. This way it is possible to do a very specific search for legal status changes. A change in the legal status is shown in the UP field.

```=> D UP LS```
```
UP 20040625
LS Date of Grant: 20040625 200426
French Patent Registry:
CD (Changement de nom, de denomination) N137202 20040128```

In FRANCEPAT license information can be displayed for patent numbers or applicants and one can even search for licensees:

```=> S PLAYBOIS/LINM```
```
L41 1 PLAYBOIS/LINM```

```=> D PA LI```
```
L41 ANSWER 1 OF 1 FRANCEPAT COPYRIGHT 2004 INPI on STN
PA
Applicant: BIETRIX ROBERT
CHE DES MOULIERES 34540 BALARUC LE VIEUX (FR)
FR.34540
LI LINM: PLAYBOIS
LIA: ZI DE BOMBES 43700 SAINT GERMAIN LAPRADE (FR)
LIT: (Societe a responsabilite limitee)
LINM: MALEYSSON CREATION
LIA: LE MOULIN DE LA ROCHEitesse ROUTE DU PUY 43800 ROSIERES (FR)```
46.7.2 Supplementary Protection Certificates

<table>
<thead>
<tr>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>/SPC</td>
<td>SPC</td>
<td>Supplementary Protection Certificate</td>
</tr>
<tr>
<td>/SPC_AD</td>
<td>SPC, Application Date</td>
<td></td>
</tr>
<tr>
<td>/SPC_BPI</td>
<td>SPC, BOPI Issue</td>
<td></td>
</tr>
<tr>
<td>/SPC_DA</td>
<td>SPC, Drug Approval</td>
<td></td>
</tr>
<tr>
<td>/SPC_DAD</td>
<td>SPC, Drug Approval Grant Date</td>
<td></td>
</tr>
<tr>
<td>/SPC_DN</td>
<td>SPC, Document Number</td>
<td></td>
</tr>
<tr>
<td>/SPC_DNM</td>
<td>SPC, Drug Name</td>
<td></td>
</tr>
<tr>
<td>/SPC_GB</td>
<td>SPC, Grant BOPI Issue</td>
<td></td>
</tr>
<tr>
<td>/SPC_GD</td>
<td>SPC, Grant Date</td>
<td></td>
</tr>
<tr>
<td>/SPC_LD</td>
<td>SPC, Lapse Date</td>
<td></td>
</tr>
<tr>
<td>/SPC_PA</td>
<td>SPC, Applicant</td>
<td></td>
</tr>
<tr>
<td>/SPC_PD</td>
<td>SPC, Publication Date</td>
<td></td>
</tr>
<tr>
<td>/SPC_RD</td>
<td>SPC, Rejection Date</td>
<td></td>
</tr>
<tr>
<td>/SPC_VD</td>
<td>SPC, Deadline of Validity</td>
<td></td>
</tr>
</tbody>
</table>

In FRANCEPAT the SPC field is subdivided into a number of search fields. This way a very specific search for details is possible. A change to the Supplementary Protection Certificate details is shown in the UP field.

=> $ RIVASTIGMINE/SPC.DNM  
L40  1 RIVASTIGMINE/SPC.DNM

=> D SPC

L40 ANSWER 1 OF 1  FRANCEPAT COPYRIGHT 2004 INPI on STN  
SPC Applicant: NOVARTIS AG / Schwarzwaldallee 215, 4085 Bale, CH  
Application Date: 19981002  
Publication: FR98C0033  
Date of Publication: 19981113 (BOPI 199846)  
Drug: RIVASTIGMINE  
Drug Approval: EU/1/98/066/001 19980512  
Date of Grant: 20010302 BOPI 200109  
Deadline of Validity 20120731 (BOPI 0109)

46.8 IFICLS / IFIALL

IFICLS (Current Patent Legal Status Database) is a database of U.S. legal status information. IFICLS contains the current legal status of US utility patents including:

- Reassigned Patents
- Reexamined Patents
- Expired Patents
- Reinstated Patents
- Certificates of Correction
- Adverse Decision in Interference
- Disclaimer/Dedication
- Reexamination Request
- Reissue Request

All data are searchable. IFICLS is reloaded every year. Reassigned Patents are updated every two months, other patents weekly.

ACCESSION NO.: 3949143 IFICLS  
PATENT ASSIGNEE: Krugman, Maurice D  
PATENT ASSIGNEE: Mostyn, William T  
PATENT ASSIGNEE: Stone, Arthur D  
PATENT INFORMATION: US 6629245 20030930  
DOCUMENT TYPE: REASSIGNED  
REASSIGNMENT INFO.:
Some information on the course of the procedure can also be found in the IFIALL database, such as Related documents in the RLI field and the Expiry date in the XPD field. The XPD field contains the calculated expiration date (up to 1995: 17 years after publication; from 1995: 20 years after filing).

**46.9 RUSSIA P A T**

<table>
<thead>
<tr>
<th>SEARCH</th>
<th>DISPLAY</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>/LS.DPF</td>
<td>LSRU</td>
<td>Legal Status, Date of First Publication</td>
</tr>
<tr>
<td>/LS.DNP</td>
<td></td>
<td>Legal Status, Date of Begin of National Phase</td>
</tr>
<tr>
<td>/LS.DPR</td>
<td></td>
<td>Legal Status, Effective Date of Property Rights</td>
</tr>
</tbody>
</table>

320
Types of search

The legal status field contains some additional data which are not available from the PI and AI fields. This legal status display belongs to an international application with RU as designated state:

\[
=> S \ RU \ 2232157/\ PN \\
=> D \ LSRU
\]

These data are also searchable.

46.10 IMSPATENTS

In addition to the publication and priority data (not always complete) the field PI contains the expiration date. The expiration date and year are searchable in the /XPD and /XPY fields. In addition there are a text field and an abstract field, the text field containing comments on the legal status in the individual countries and the abstract field containing comments on the patent family. The comments come from various sources and are added to the documents. The individual family members may even have different abstracts.

<table>
<thead>
<tr>
<th>Number</th>
<th>Publication</th>
<th>Expiration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td>PI</td>
<td>EP 779805</td>
<td>20011212</td>
</tr>
<tr>
<td>D5</td>
<td>Luxembourg</td>
<td></td>
</tr>
</tbody>
</table>

PRAI

<table>
<thead>
<tr>
<th>Country</th>
<th>Comments: SPC Granted</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 1994-300138</td>
<td>19940902</td>
</tr>
<tr>
<td>US 1994-300713</td>
<td>19940902</td>
</tr>
<tr>
<td>US 1994-304129</td>
<td>19940912</td>
</tr>
<tr>
<td>US 1994-317465</td>
<td>19941004</td>
</tr>
<tr>
<td>US 1995-400610</td>
<td>19950308</td>
</tr>
</tbody>
</table>

TX

Country Comments: EP 779805 B is based on WO 96/7398 and claims a solid, non-particulate, sustained release pharmaceutical composition for parenteral administration. The composition SOMATULINE of lanreotide acetate is specifically claimed. EP 779805 B is assigned to Delab. A supplementary protection certificate (SPC) for the SOMATULINE AUTOGEL formulation of lanreotide acetate has been granted in Luxembourg as national number 91037 citing EP 779805 B. The certificate comes into force on expiry of the cited patent and expires on 11 May 2016. The holder of the SPC is SCRAS.

AB

The patent family listed here covers automated controlled delivery systems for drugs. The SOMATULINE AUTOGEL composition of lanreotide acetate is quoted in SPC applications relating to this family. The patent family is divided into three main parts: WO 96/7397 quotes priorities 300713 and 317465 and claims a method of parenterally administering a drug to a patient for immediate dispersal of the drug once administered; WO 96/7398 quotes priorities 300138, 300713 and 400610 and claims a solid, non-particulate, sustained release pharmaceutical composition for parenteral administration; WO 96/7440 quotes priorities 300138 and 304129 and claims a device for the automatic delivery of an active ingredient according to an adjustable delivery profile. Some of the patents/applications have been reassigned to Delab.

To display the legal status details of the patents concerning a substance tabular formats, such as CYTAB, are useful (see the IMSPATENTS database description).
47 Citation search

47.1 Typical enquiries

- You are interested in a patent, US 6,311,197. A citation search may help you find out:
  - Which other patents are cited in the patent, US 6,311,197? This provides information on earlier inventions in the field.
  - Which other patents cite the application, US 2001/003823, or the patent? This provides information on more recent patents in the field.
  - The number of citations may indicate how important a particular patent is.
- You do a prior art search.
  - Citations may provide extra documents which were not found in the subject search.
  - Citations by a different patent authority may help you find material for an opposition.
- Analysing competition:
  - Finding competitors who are particularly interested in your patents.
  - Which companies own the most significant patents?
  - Which are the most advanced competitors in the field?
- Evaluating the citations of one’s own patents:
  - Who cites our patents?
  - Possible infringements
  - Monitoring
- Comparing the citations by various patent offices.
- Evaluating the citation categories of EP, WO, FR, and GB patents.

47.2 Databases with citation information

<table>
<thead>
<tr>
<th>Database</th>
<th>Sources</th>
<th>SEARCH fields</th>
<th>DISPLAY fields</th>
</tr>
</thead>
</table>
### Types of search

<table>
<thead>
<tr>
<th>Database</th>
<th>Sources</th>
<th>SEARCH fields</th>
<th>DISPLAY fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPFULL</td>
<td>EP</td>
<td>/RPC, /RPN, /REN</td>
<td>REP, REPA, REN, RENA</td>
</tr>
<tr>
<td>FRANCEPAT</td>
<td>FR</td>
<td>/RPC, /RPK, /RPT, /REN</td>
<td>REP, REN, RRI, NSR</td>
</tr>
<tr>
<td>PATDPA</td>
<td>DE (DPMA)</td>
<td>/RPC, /RPK, /RPN, /RPT, /REN</td>
<td>REP, RE</td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td>EP (XP-Dokumente)</td>
<td>/REN</td>
<td>REN</td>
</tr>
<tr>
<td>USPATALL***</td>
<td>US (USPTO)</td>
<td>/RPC, /RPCL, /RPD, /RPIC, /RPIN, /RPN, /RPY, /REN</td>
<td>REP, REN</td>
</tr>
<tr>
<td>USPATOLD</td>
<td>US (USPTO)</td>
<td>/RPC, /RPN</td>
<td>REP</td>
</tr>
<tr>
<td>SCISEARCH ****</td>
<td>Scientific literature</td>
<td>/RIN, /RPY, /RPN, /RAU, /RPI, /RVY, /RPY, /RWNK</td>
<td>REP, RE</td>
</tr>
</tbody>
</table>

Due to limited space the table does not show all available fields in all databases.

* Only citations from Basic Patents are entered (except US Patents).
** On the fields in DPCI see below in section Derwent Patents Citation Index (DPCI).
*** As both USPATFULL and USPAT2 contain US Patents, the cluster of both databases, USPATALL, should be used.
**** SCISEARCH contains citations from the scientific journal literature. For searching literature citations there are far more fields available than there could be included in the table.

A number of patent databases have citations from the title pages of patent publications. These are mainly from the patent examination. Some patent offices do a separate prior art search, which may be included in the databases, too.

EPFULL contains inventor citations (patent and non-patent literature; REPA, RENA) from 2006.

Basically a search for citations is a search for publication numbers. Usually the SEARCH field /RPN (Referenced Patent Number) is used. Some of the databases have additional fields (see table above).

With DPCI now covering more than 10 years for the countries selected and its search and display options being most comprehensive it is advisable to use this database. Citation statistics are best performed in DPCI, too.

The INPADOCDB/INPAFAMDB databases include citations from 27 patent organisations, the search and display options have been considerably improved. Thus, INPADOCDB/INPAFAMDB can also be recommended for citation searches. The choice between INPADOCDB and INPAFAMDB should be made on the basis of the display formats desired.

**Note.** The SCISEARCH database does not include patents. Citations to patents contained in this database are from other types of publications (e.g. journal articles). Concerning patent citations this database should be considered nothing more than an additional source.

### 47.3 Cited and citing patents

In the field of patents, citations play an equally important role as in scientific literature:

- The inventor uses them to characterise the state of the art based on which he made his invention,
- The patent examiner tries to find patents that may oppose the new patent to be granted and cites them against the application.
When a patent X is published it has references to earlier publications, i.e. patents (= Cited Patents, CDP) or other literature. These can be located either in the text of the publication or on the title page. The references are introduced:

1. By the inventor or applicant—these are spread over the text, or
2. By the examiner citing them against the application as relevant prior art – these are normally printed on the title page.

These citations are usually entered into the RE field in the databases (or probably REP for the cited patents and REN for the cited non-patent literature).

The patent X itself may now be cited in other patents (= Citing Patents, CGP). Then the number of the patent X will be printed on the other patents and introduced into the REP field of these patent records in the databases.

In the Derwent Patents Citation Index, CAPLUS and INPADOC one step further is taken: Here the citing patents too are entered into the record of the patent X. This way a loop is introduced (dotted lines).
47.4 Derwent Patents Citation Index (DPCI)

DPCI is much more comprehensive than other patent databases concerning coverage of citations (cf. above):

- Patents and literature cited and citing (from the Basic and Equivalents),
  - By examiners
  - By inventors/authors
  - By opponents/third parties during the determination of patentability

This database contains citation data from the patent publications of these countries (and patent organisations) (please see the DPCI database description for more details):

- Mid-1994 to May 1997 only: AT, CA, SE

The structure of DPCI (SEARCH and DISPLAY fields) is primarily designed for citation searching and should be used in this way. Searches by text, etc., should rather be performed in the Derwent World Patents Index (WPINDEX, WPIDS, WPIX). Identical Accession numbers (AN) are used in both DPCI and the World Patents Index, so using this for crossover is possible and advisable.

In DPCI, for searching cited or citing patents the usual bibliographical field codes are used, being qualified for citation searching by appending extra letters: /PN → /PN.D, /PN.DI, /PN.DX, /PN.DHT, /PN.DO, /PN.G, /PN.GI, /PN.GX, /PN.GHT, /PN.GO, etc. The table below provides an overview of these fields.

<table>
<thead>
<tr>
<th>Field contents</th>
<th>Cited Patent (CDP)</th>
<th>Citing Patent (CGP)</th>
<th>Family member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>/CAT.D</td>
<td>/CAT.G</td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td>/IN.D</td>
<td>/IN.G</td>
<td></td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/IN.DI</td>
<td>/IN.GI</td>
<td></td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/IN.DX</td>
<td>/IN.GX</td>
<td></td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/IN.DHT</td>
<td>/IN.GHT</td>
<td></td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/IN.DO</td>
<td>/IN.GO</td>
<td></td>
</tr>
<tr>
<td>DWPI Accession Number</td>
<td>/OS.D</td>
<td>/OS.G</td>
<td></td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/OS.DI</td>
<td>/OS.GI</td>
<td></td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/OS.DX</td>
<td>/OS.GX</td>
<td></td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/OS.DHT</td>
<td>/OS.GHT</td>
<td></td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/OS.DO</td>
<td>/OS.GO</td>
<td></td>
</tr>
<tr>
<td>Patent Assignee</td>
<td>/PA.D</td>
<td>/PA.G</td>
<td></td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/PA.DI</td>
<td>/PA.GI</td>
<td></td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/PA.DX</td>
<td>/PA.GX</td>
<td></td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/PA.DHT</td>
<td>/PA.GHT</td>
<td></td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/PA.DO</td>
<td>/PA.GO</td>
<td></td>
</tr>
</tbody>
</table>
Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>Field contents</th>
<th>Cited Patent (CDP)</th>
<th>Citing Patent (CGP)</th>
<th>Family member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent Assignee Code</td>
<td>/PACO.D</td>
<td>/PACO.G</td>
<td></td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/PACO.DI</td>
<td>/PACO.GI</td>
<td></td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/PACO.DX</td>
<td>/PACO.GX</td>
<td></td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/PACO.DHT</td>
<td>/PACO.GHT</td>
<td></td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/PACO.DO</td>
<td>/PACO.GO</td>
<td></td>
</tr>
<tr>
<td>Publication Country</td>
<td>/PC.D</td>
<td>/PC.G</td>
<td></td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/PC.DI</td>
<td>/PC.GI</td>
<td></td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/PC.DX</td>
<td>/PC.GX</td>
<td></td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/PC.DHT</td>
<td>/PC.GHT</td>
<td></td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/PC.DO</td>
<td>/PC.GO</td>
<td></td>
</tr>
<tr>
<td>Kind of Document</td>
<td>/PK.D</td>
<td>/PK.G</td>
<td></td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/PK.DI</td>
<td>/PK.GI</td>
<td></td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/PK.DX</td>
<td>/PK.GX</td>
<td></td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/PK.DHT</td>
<td>/PK.GHT</td>
<td></td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/PK.DO</td>
<td>/PK.GO</td>
<td></td>
</tr>
<tr>
<td>Publication Number</td>
<td>/PN.D</td>
<td>/PN.G</td>
<td></td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/PN.DI</td>
<td>/PN.GI</td>
<td></td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/PN.DX (RPN)</td>
<td>/PN.GX</td>
<td></td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/PN.DHT</td>
<td>/PN.GHT</td>
<td></td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/PN.DO</td>
<td>/PN.GO</td>
<td></td>
</tr>
<tr>
<td>Country Count</td>
<td>/IAC.D</td>
<td>/IAC.G</td>
<td></td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/IAC.DI</td>
<td>/IAC.GI</td>
<td></td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/IAC.DX</td>
<td>/IAC.GX</td>
<td></td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/IAC.DHT</td>
<td>/IAC.GHT</td>
<td></td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/IAC.DO</td>
<td>/IAC.GO</td>
<td></td>
</tr>
<tr>
<td>– undefined</td>
<td>/IAC.DUN</td>
<td>/IAC.GUN</td>
<td></td>
</tr>
<tr>
<td>Patent Number Count</td>
<td>/PNC.D</td>
<td>/PNC.G</td>
<td></td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/PNC.DI</td>
<td>/PNC.GI</td>
<td></td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/PNC.DX</td>
<td>/PNC.GX</td>
<td></td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/PNC.DHT</td>
<td>/PNC.GHT</td>
<td></td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/PNC.DO</td>
<td>/PNC.GO</td>
<td></td>
</tr>
<tr>
<td>– undefined</td>
<td>/PNC.DUN</td>
<td>/PNC.GUN</td>
<td></td>
</tr>
<tr>
<td>DWPI Accession Number Count</td>
<td>/OSC.D</td>
<td>/OSC.G</td>
<td></td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/OSC.DI</td>
<td>/OSC.GI</td>
<td></td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/OSC.DX</td>
<td>/OSC.GX</td>
<td></td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/OSC.DHT</td>
<td>/OSC.GHT</td>
<td></td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/OSC.DO</td>
<td>/OSC.GO</td>
<td></td>
</tr>
<tr>
<td>– undefined</td>
<td>/OSC.DUN</td>
<td>/OSC.GUN</td>
<td></td>
</tr>
</tbody>
</table>

The /*.D (and /*.G) search fields put together the data of the /*.DX, /*.DI, /*.DHT, and /*.DO fields (or /*.GX, /*.GI, /*.GHT, and /*.GO fields respectively).

<table>
<thead>
<tr>
<th>Field contents</th>
<th>Cited Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference (Literature)</td>
<td>/REN</td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/REN.I</td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/REN.X</td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/REN.TH</td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/REN.O</td>
</tr>
<tr>
<td>Publication country of the citing family member</td>
<td>/REPC</td>
</tr>
<tr>
<td>Publication kind of the citing family member</td>
<td>/REPK</td>
</tr>
<tr>
<td>Publication number of the citing family member</td>
<td>/REPN</td>
</tr>
<tr>
<td>References Count</td>
<td>/CRC</td>
</tr>
<tr>
<td>– cited by applicant</td>
<td>/CRC.I</td>
</tr>
<tr>
<td>– cited by examiner</td>
<td>/CRC.X</td>
</tr>
<tr>
<td>– cited by third party</td>
<td>/CRC.TH</td>
</tr>
<tr>
<td>– cited in opposition</td>
<td>/CRC.O</td>
</tr>
<tr>
<td>– undefined</td>
<td>/CRC.UN</td>
</tr>
</tbody>
</table>

The data of Cited Patents and Citing Patents are arranged in a similar way in a DPCI record:

Citing Publication | By | Cat | Cited Patent | Date | Accession Number
------------------|----|-----|--------------|------|----------------
WO 2010115838 A1 | E | X | DD 298280 A5 | 19920213 | 1992-226751
PA: (JENP-C) JENAPHARM GMBH; (NEUB-N) NEUBAPHARM GMBH

326
Types of search

NEUBRANDBURG
IN: BEYER D; CHRISTNER A; GRI MMERT R; GROSSE H H;
HEINIG K; HELLER I; HELMKE C; HOESEL P; KAUDER D;
PLONKA G; WOLLESCHENSKA E

Family member Who Category Citation DWPI Acc. Number
PA: (PACO) Patent assignee
IN: inventor

Thus, the respective SEARCH fields are assigned like this:

- For Cited patents (CDP):
  - PC.F, PN.F, PK.F
  - CAT.D
  - PA: (PACO.D)
  - IN: I.N.D
  - OS.D

- For Citing patents (CGP):
  - PC.F, PN.F, PK.F
  - CAT.G
  - PA: (PACO.G)
  - IN: I.N.G
  - OS.G

The data of a particular citation entry are linked by (P) proximity:

=> S CHCC/PACO.D (P) US/PC.F
   8636 CHCC/PACO.D
   {CHCC-C/ PACO.D}
   3517148 US/PC.F
   L9 4734 CHCC/PACO.D (P) US/PC.F

When doing a cross-file search, please note that the /RPN field is only equivalent to /PN.DX but not to /PN.D. If inventor citations are to be included in DPCI either the /PN.D field has to be used or the /PN.DI field must be searched in addition. In many cases it is advisable to also search for citations (Citing patents in particular) in other databases in addition to DPCI. When searching for Citing patents the CGP field should not be the only source as not all citations are actually included in every case. Often a SEARCH in the /RPN field (multi-file) or /PN.D field (DPCI) may yield additional results.

Relevance categories. WO, EP, ES, FR, GR, IT, LU, NL, NO, and TR search reports contain categories of the references to indicate the relevance of the cited documents to the invention (A E L O P T X I Y). These categories are meant as a quick classification of prior-art publications, they do not represent an in-depth evaluation of invention features.

CDP Cited Patents

<table>
<thead>
<tr>
<th>Citing Publication</th>
<th>By</th>
<th>Cat</th>
<th>Cited Patent</th>
<th>Date</th>
<th>Accession Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA: (SCHD-C) SCHERING AG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN: BAEURLE S; BERGER M; JAROCH S; KROLIKIEWICZ K; MENGEN L A; NGUYEN D; REHWINKEL H; SCHAECKE H; SCHMEES N; SKUBALLA W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E PX WO 2006100100 A1</td>
<td>20060928</td>
<td>2006-697791</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA: (SCHD-C) SCHERING AG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN: BAEURLE S; BERGER M; BUCHMANN B; KROLIKIEWICZ K; MENGEN L A; REHWINKEL H; SCHAECKE H; SCHMEES N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These relevance categories can be searched in the /CAT.D and /CAT.G fields and their meaning is:
Relevance categories from EP and WO search reports:

<table>
<thead>
<tr>
<th>Relevance Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>Publications that taken alone question the novelty of the application</td>
</tr>
<tr>
<td>I</td>
<td>Publications that taken alone question the inventive step of the application</td>
</tr>
<tr>
<td>Y</td>
<td>Publications that considered together with another publication question the inventive step</td>
</tr>
<tr>
<td>A</td>
<td>Technological background</td>
</tr>
<tr>
<td>O</td>
<td>Non-written disclosure, e.g. held at a conference before the priority/application date, but published in print after that date</td>
</tr>
<tr>
<td>P</td>
<td>Publication published after the claimed priority date, but before the EP/WO application date</td>
</tr>
<tr>
<td>E</td>
<td>Earlier patent document, but published on, or after the EP/WO application date</td>
</tr>
<tr>
<td>T</td>
<td>Later publication, not in conflict, cited to better understand the principle or theory underlying the invention</td>
</tr>
<tr>
<td>D</td>
<td>Document mentioned in the application</td>
</tr>
<tr>
<td>L</td>
<td>Document cited for other reasons, e.g. to establish the publication date of another document or that may throw doubt on the priority</td>
</tr>
</tbody>
</table>

**XP numbers** in European Search Reports and Patents refer to non-patent literature (field /REN). These numbers point to documents in an EPO internal database. They can be found in the EPFULL, DPCI, INPADOCDB/INPAFAMDB, RDISCLOSURE and CA databases. DPCI, EPFULL, INPADOCDB/INPAFAMDB and CA additionally contain references to the respective journals.

```
=> S XP002000032/REN
L21 4 XP002000032/REN
```

```
=> D REN
```

**REN Literature Citations**

```
<table>
<thead>
<tr>
<th>Citing Publication</th>
<th>By</th>
<th>Cat</th>
<th>Literature Reference</th>
</tr>
</thead>
</table>
```

**47.5 Notes**

INPADOCDB/INPAFAMDB contain cited patents and references and citing patents of 27 patent organisations including patent and non-patent literature: AP, AU, BE, BG, CH, CN, CY, CZ, DE, DK, EA, EP, ES, FI, FR, GB, GR, IT, JP, KR, LU, NL, NO, SG, TR, TW, US, WO.

Both patent and non-patent references can be searched and displayed in detail. The source of the citation can be searched (/SRT) and the cited patent assignee (/PAS.D) has been entered. Non-patent references include XP numbers and DOI links (Digital Object Identifier). The following information from EP and WO search reports is also entered in the database:

- Relevance category
Types of search

- Cited application numbers in the REAI field in these cases:
  - If the application was published the respective publication number is entered in the REP field and labelled with an asterisk *
  - Pending applications (not yet published)
  - Provisional US applications (no publication)
  - Abandoned applications (no publication)
  - Application number (original format, no STN format yet)

- Office that has created the search report:/SRO (WO only)

The sources of citations are displayed for these countries: AP*, AU*, BE, BG*, CH, CN*, CY, CZ*, DE, DK, EA*, EP, ES*, FI*, FR, GB*, GR, IT, JP*, KR*, LU, NL, SG*, TR, TW*, US, WO. For countries marked with * the citations come from search reports only. For the other countries the citations may also be by the applicant or inventor, they are taken from the description and in particular the “Background of the invention” section. For EP and WO publications there may be other sources (see table below).

These search and display fields are available for references:

<table>
<thead>
<tr>
<th>Reference information</th>
<th>Search field</th>
<th>Display field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent number of patent references</td>
<td>/RPN (/PN.D)</td>
<td>REP</td>
</tr>
<tr>
<td>Country of patent references</td>
<td>/RPC (/PC.D)</td>
<td>REP</td>
</tr>
<tr>
<td>Publication kind code of patent references</td>
<td>/RPK (/PK.D)</td>
<td>REP</td>
</tr>
<tr>
<td>Publication date of patent references</td>
<td>/RPD (/PD.D)</td>
<td>REP</td>
</tr>
<tr>
<td>Publication year of patent references</td>
<td>/RPY (/PY.D)</td>
<td>REP</td>
</tr>
<tr>
<td>Patent assignee of patent references</td>
<td>/PAS.D</td>
<td>REP</td>
</tr>
<tr>
<td>Number of patent references</td>
<td>/REC (RE.CNT)</td>
<td>REC</td>
</tr>
<tr>
<td>Application number of reference</td>
<td>/AP.D</td>
<td>REAI</td>
</tr>
<tr>
<td>Application country of reference</td>
<td>/AC.D</td>
<td>REAI</td>
</tr>
<tr>
<td>Application kind code of reference</td>
<td>/AK.D</td>
<td>REAI</td>
</tr>
<tr>
<td>Cited non-patent literature</td>
<td>/REN</td>
<td>REN</td>
</tr>
<tr>
<td>XP number of the EPO</td>
<td>/REXP</td>
<td>REXP</td>
</tr>
<tr>
<td>Patent number of citing patent</td>
<td>/PN.G</td>
<td>CGP</td>
</tr>
<tr>
<td>Country of citing patent</td>
<td>/PC.G</td>
<td>CGP</td>
</tr>
<tr>
<td>Number of citing patents</td>
<td>/PNC.G</td>
<td>CGP</td>
</tr>
<tr>
<td>Display format for cited and citing patents</td>
<td>—</td>
<td>CITN</td>
</tr>
<tr>
<td>Display format for cited and citing patents for every family member, including the publication numbers</td>
<td>—</td>
<td>PICITN</td>
</tr>
<tr>
<td>Source of the reference</td>
<td>/SRT</td>
<td>REP</td>
</tr>
<tr>
<td>SEA</td>
<td>Search report</td>
<td></td>
</tr>
<tr>
<td>APP</td>
<td>Inventor (text of the application)</td>
<td></td>
</tr>
<tr>
<td>EXA</td>
<td>Examination</td>
<td></td>
</tr>
<tr>
<td>OPP</td>
<td>Opposition (EP only)</td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>Third parties (EP only)</td>
<td></td>
</tr>
<tr>
<td>ISR</td>
<td>International Search Report (WO only)</td>
<td></td>
</tr>
<tr>
<td>SUP</td>
<td>Supplementary Search Report (WO only)</td>
<td></td>
</tr>
<tr>
<td>CH2</td>
<td>International Preliminary Examination Report (chapter II) (WO only)</td>
<td></td>
</tr>
<tr>
<td>Office that has created the search report (WO only)</td>
<td>/SRO</td>
<td>REP</td>
</tr>
<tr>
<td>Relevance categories from search reports from : EP, WO ES, FR, GR, IT, LU, NL, NO, TR:</td>
<td>/CAT</td>
<td>REP</td>
</tr>
</tbody>
</table>

A D E I L O P T X Y

The RE display format can be used in INPADOCDB and in INPAFAMDB (de-duped format).
Guide to STN Patent Databases

WO 2009-EP9069   W 20091218
REP US 20060263835   A1 20061123 (SEA, pat, Cat: X)
MAX DELBRUECK CENTRUM, DE
WO 9906293   A1 19990211 (APP, pat)
SOUTHCORP AUSTRALIA PTY LTD, AU; DAVIES KELVIN ALLAN, AU; SOUTH ROLAND
DAVID, AU
WO 2002038592   A2 20020516 (APP, pat)
ROENSPECK WOLFGANG, DE; KUNZE RUDOLF, DE
WO 9962933   A2 19991209 (APP, pat)
IMTOX GMBH, DE; WALLUKAT GERD, DE; SCHNEIDER GISBERT, DE; SCHROEDL
WIELAND, DE; MUELLER JOHANNES, DE; ROENSPECK WOLFGANG, DE; WREDE PAUL,
DE; KUNZE RUDOLF, DE
EP 1214350   A1 20020619 (APP, pat)
AFFINA IMMUNTECHNIK GMBH, DE
WO 9956126   A2 19991104 (APP, pat)
AFFINA IMMUNTECHNIK GMBH, DE; GEBAUER FRANK, DE
WO 200206292   A1 20020404 (APP, pat)
AFFINA IMMUNTECHNIK GMBH, DE; KUNZE RUDOLF, DE
REAI DE 10256897          A  (APP, pat)
REXP XP002545905      (SEA, Cat: X)
XP002545906      (SEA, Cat: Y)
REN (1) XIU BI-YING ET AL: “Antibodies against beta1 and beta2 adrenergic
receptors in myasthenia gravis“ JOURNAL OF NEUROIMMUNOLOGY, vol. 91, no.
1-2, 2 November 1998 (1998-11-02), pages 82-88, XP002545905 ISSN:
0165-5728 (SEA, Cat: X)
(2) BLAES F ET AL: “Autoimmunity in complex-regional pain syndrome.”
(2007-06), pages 168-172, XP002545906 ISSN: 0077-8923 (SEA, Cat: Y)
(3) PNAS USA vol. 95, 13 October 1998, pages 12179 - 84 (APP)
(4) MOL. DIVERSITY vol. 8, 2004, pages 281 - 290 (APP)
(5) J. OF IMMUNOL. METHODS vol. 267, 2002, pages 37 - 51 (APP)
(6) BIOCHEMISTRY vol. 40, 19 April 2001, pages 5720 - 27 (APP)
(7) BIOPOLYMERS (PEPTIDE SCIENCE vol. 80, 23 February 2005, pages 67 - 84
(APP)
REC 15. THERE ARE 15 CITED REFERENCES (8 PATENT, 7 NON PATENT) AVAILABLE FOR
THIS RECORD.
1 priority, 2 applications, 2 publications

The PICITN display format is used in INPADOCDB to display cited and citing patents together with the (citing/cited) publication number.

=> US20120008660/PN
L12 1 US20120008660/PN

=> D PICITN
L12 ANSWER 1 OF 1 INPADOCDB COPYRIGHT 2013 EPO/FIZ KA on STN
PI US 20120008660   A1 20120112
REP US 20080191223   A1 20080814 (PRS, pat)
UNIV CALIFORNIA, US
US 20080126688   A1 20060615 (PRS, pat)
PA O ALTO RES CT INC
REN (1) Ponce et al., "Lattice Mismatch and Misfit Dislocation in Hexagonal
GaN-Based Heterostructures for Solid State Lighting Applications," 2007,
Acta Microscopica, vol. 16, pg. 8-9. (PRS)
(2) Scheinbenzuber et al., "Calculation of Optical Eigenmodes and Gain in
B, 80, 115320, 16. (PRS)
REC 4. THERE ARE 4 CITED REFERENCES (2 PATENT, 2 NON PATENT) AVAILABLE FOR
THIS RECORD.
CGP US 20110164637   A1 20110707 [US20120008660A1 (PRS, pat)]
SUMI TOMO ELECTRIC INDUSTRIES, JP
US 20110188005   A1 20110802 [US20120008660A1 (PRS, pat)]
SUMI TOMO ELECTRIC INDUSTRIES, JP
US 201102092957   A1 20111201 [US20120008660A1 (PRS, pat)]
BHAT RAJARAM; SILOZ DMITRY
US 8189639   B2 20120529 [US20120008660A1 (SEA, pat)]
Types of search

In **CAPLUS** cited references are included for basic patents from US, EP, WO, DE, and for journals and conference proceedings since 1997. Patent examiner citations from GB (since 2003), FR (since 2003), CA (since 2005) and from nearly 300,000 patent records from 1982 to 2008 are added. Since the basic publications often are published applications and have no references patent citations tend to be incomplete.

In order to find documents citing a given publication Citing Patents were introduced:

=> D OS6

L1 ANSWER 1 OF 608442 HCAPLUS COPYRIGHT 2009 ACS on STN
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
UPOS.G Date last citing reference entered STN: 23 Jul 2009

The CA accession numbers are linked.

**PATDPA** since 1994 also contains citations from the patent examination that have led to the application being rejected and which therefore never were published on a patent document. These can be recognised by the entry ‘SRP’ as the type of reference (RPT) without a patent document (kind codes DEB# or DECA) having been published and a ‘Zurueckweisung’ (‘Rejection’) or ‘Zuruecknahme’ (‘Withdrawn’) entry in the NTE field. Currently, PATDPA is the only database holding this type of data, which is not entered in DPCI either.

L10 ANSWER 1 OF 4 PATDPA COPYRIGHT 1999 DPMA/FIZ KA
Tl (A1) Verfahren zum Auslosen eines Insassenschutzsystems fuer Kraftfahrzeuge sowie ein Insassenschutzsystem fuer Kraftfahrzeuge
PA TEMIC TELEFUNKEN microelectronic GmbH (*DE 74072 Heilbronn*)
PI DE 19757137 A1 19990218 AO (10) 1.Publ./ DE-Schrift
RE REP DE 4433601 C1 SRP (56) AUS NATION. PRUEFUNGSVERF.
DE 3736296 C1 SRP (56) AUS NATION. PRUEFUNGSVERF.
DE 9610833 A1 SRP (56) AUS NATION. PRUEFUNGSVERF.
WO 9214633 A1 SRP (56) AUS NATION. PRUEFUNGSVERF.
NTE 19971220: ADP (22) Anmeldetag d. DE-Patentanm.
19990218: A0 (43) Offenlegungstag der DE-Anmeldung (OS)
19990218: AVO (43) vorgezogene Offenlegung d. Patentanm.
19990218: EX (43) Pruefungsantrag gestellt
19990520: SRP C107 Ermittl. d. Entgegenhaltungen nach Offenlegung
19990715: ZWAO H131 ZURUECKWEISUNG NACH DE-OFFENLEGEN

**USPATALL** is the cluster consisting of the USPATFULL and USPAT2 databases. Since both databases contain citations both—or the USPATALL cluster—should be used for citation searching. Citations published upon publication of the US Patent are not entered into the record of the Application.

**EPFULL** contains citations from publications of the European Patent Office. These are usually entered together with European Patents (EPB1).
48  Crossover between databases

48.1  Crossover using L numbers or E numbers, TRANSFER

The familiar crossover options using L or E numbers can also be used between patent databases. In addition to possibly varying field designations and field contents, these points should be considered:

- Varying languages,
- Varying options for free-text searching,
- Varying index forms, particularly in the name fields.

When searching patent databases a search result often has to be transferred between databases, for example in order to compare two search results or to find additional information. For this transfer, a unique identification for a patent document is necessary. This may be a patent number, application number, or, in some cases, the accession number. The transfer can be made using SELECT (creating an E# list) or TRANSFER (creating an L number). For example, to obtain the full text of European publications in EUROPATFULL for a search result from DWPI, this strategy could be employed:

```
=> FIL WPINDEX
=> S SONOPRESS/PA
  L1          27 SONOPRESS/PA
=> FIL EPFULL
=> TRANSFER L1 1. PN
  L2          TRANSFER L1 1. PN : 111 TERMS
  L3          19 L2
=> D 1. ALL
```

Before using SELECT or TRANSFER, the search costs should be taken into account:

- SELECT (E#): varying costs per processed document, depending on the type of the selected data
- TRANSFER (L#): fixed price per use

When crossing over from DPCI to DWPI (WPINDEX, WPIDS, WPIX), SELECT or TRANSFER are not necessary. A simple search command is sufficient:

```
=> FIL DPCI
=> S JENOPTIK/PA.D
  L5          1999 JENOPTIK/PA.D
=> FIL WPIND
=> S L5
  L6          1999 L5
```

Note on Chemical Abstracts. When using SELECT or TRANSFER the databases without SEARCH term charges should be used (HCA, HCAPLUS).

48.2  Simultaneous search in multiple databases (Multi-file SEARCH)

As the contents and search options in the databases vary considerably one will choose a suitable database to obtain a good result once the search criteria have been clarified (see “Overview of search options” and “Using STN databases to conduct a patent search”). After the first search it may be helpful to consult a second or third database in order to complete the search results.

In some cases it may be useful to perform a multi-file search in a number of databases.

There are a number of search types where a multi-file SEARCH can be particularly useful:

- Search by number (publication number, reference number)
- Search by the International Patent Classification
Types of search

- Parallel free-text searching in more than one database (mono- or multilingual)
- SDI searches in DWPI and WPIFV
- Name searches using EXPAND lists
- Text searches or SDI searches for all patent documents relevant to Germany in the PATDPAFULL, EPFULL, and PCTFULL databases.

After a multi-file search, the documents retrieved should be sorted into family groups by using the FSORT command. This allows for documents of the same patent family being easily identified and, if necessary, eliminated.

48.3 Identifying duplicates

The DUPLICATE command can be used in multi-file searches in order to identify and, if necessary, eliminate duplicates. This function can be used in all the databases dealt with in this guide.

In order to identify duplicates the DUPLICATE command uses the publication country, document number, and publication date.

In most cases duplicates can be detected, except for the following cases:

Chemical Abstracts: The DUPLICATE command uses only the data of the first line of the PI field. Documents entered as Equivalent in the Chemical Abstracts will not be found as duplicates.

INPADOCDB/INPAFAMDB: The DUPLICATE command uses only the data from the PI field of the first publication. The other publications are not used.

PATDPA: Of the PI field only the first line (latest publication) is used. The other (earlier) publication levels are not considered.

World Patents Index: The DUPLICATE command uses only the data of the Basic. Thus, documents only entered as Equivalent in the World Patents Index will not be detected as duplicates.

DPCI: The DUPLICATE command cannot be used.

Generally it is, however, preferable to use the FSORT command together with D PFAM instead of the DUPLICATE command if only one member of the patent family is to be displayed.

As INPADOCDB has standardised and current priority numbers it is advisable to include INPADOCDB in an FSORT command for a more complete duplicate and family identification; see “Multi-file” search example, “Full-text databases”.

48.4 Crossover using the OS field

<table>
<thead>
<tr>
<th>Field</th>
<th>From database</th>
<th>To database</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS</td>
<td>CA</td>
<td>CASREACT, MARPAT</td>
</tr>
<tr>
<td></td>
<td>USPATFULL/USPAT2</td>
<td>CA</td>
</tr>
<tr>
<td></td>
<td>USPATOLD</td>
<td>CA</td>
</tr>
<tr>
<td></td>
<td>DGENE</td>
<td>DWPI</td>
</tr>
<tr>
<td></td>
<td>ENCOMPPAT</td>
<td>DWPI</td>
</tr>
<tr>
<td></td>
<td>IFIALL</td>
<td>CA</td>
</tr>
<tr>
<td></td>
<td>PATDPA</td>
<td>CA</td>
</tr>
</tbody>
</table>

In the OS field usually the name and Accession Number of the other database are specified and may be used to retrieve the corresponding document in that database. Crossover to the other database is carried out with the help of SELECT: (Illustrated here by a search example from PATDPA.)

```plaintext
=> SEL 1·OS
E1 THROUGH E4 ASSIGNED

=> D SEL
E1  3   CA/OS
E2  1   87:134706/OS
E3  1   92:266211/OS
E4  1   98:215483/OS
```
### Guide to STN Patent Databases

```plaintext
=> F L HCA
=> S E2-4/AN

1 "87:134706"/AN
1 "92:28621"/AN
1 "98:215483"/AN

L14       3 ("87:134706"/AN OR "92:28621"/AN OR "98:215483"/AN)
```
49 Display of patent images and full-text images

49.1 Image data in patent databases

Patent databases containing images: AUPATFULL, CANPATFULL, CNFULL, DWPI, FRANCEPAT, FRFULL, GBFULL, EPFULL, INFULL, JAPIO, KOREAPAT, PATDPA, PATDPAFULL, PCTFULL, RDISCLOSURE, RUSSIAPAT.

All databases have an entry “GI” in the Field Availability (FA) field if a record includes a patent image:

=> S L1 AND GI/FA

The Graphics Information Size /GIS field holds the image size:

=> D 1-3 GIS

The images are displayed with the GI field or as part of a predefined display format (BIB.G, MAXG, etc.).

Patent images are stored in these formats:

<table>
<thead>
<tr>
<th>Image Format</th>
<th>File Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIFF</td>
<td>.tif</td>
</tr>
<tr>
<td>JPEG</td>
<td>.jpg</td>
</tr>
<tr>
<td>GIF</td>
<td>.gif</td>
</tr>
<tr>
<td>Structure Image</td>
<td>.gra</td>
</tr>
</tbody>
</table>

The images can be transferred using STN Express or STN on the Web. The images are displayed in the document context. When using STN Express the images may also be displayed in a separate window using the TIFF Viewer. With STN Express, version 8.4 or later, the images are transferred faster than with previous versions. With STN on the Web the transcript files with images should be saved as RTF (Rich Text Format).

49.2 CA/CAPLUS

The TIFF or GIF images of the scanned pages from the printed Chemical Abstracts of the years 1907–1966 can be displayed in CAPLUS. The DISPLAY formats are: PAGE, PAGE.NEXT, and PAGE.PREV. It is a good idea to use STN Express or STN on the Web.

49.3 DWPI

The DWPI database contains patent images (technical and chemical structure drawings):

- Engineering: from Derwent week (DW) 8801
- Chemistry: from Derwent week (DW) 9201

Generally, a record holds no more than one patent image. It is, however, not necessarily the drawing from the title page of the patent document. Sometimes, however, there may be more than one patent image.

Images in DWPI are scanned at 300 dpi. Images are displayed in the GI or GI.M display fields.

Additionally, there is a number of display formats that include images and where the image is displayed at invention level: e.g. ALLG, BRIEFG, FULLG, MAXG. To obtain an image and its respective Member at publication level the MEMBG or MEMBFG formats can be used.

49.4 RDISCLOSURE

In RDISCLOSURE the full text is searchable, it can be displayed as ASCII text without images (ALL format) or as page images, including drawings, using one of these formats:

- TIFF – DISPLAY ALL (STN Express or STN on the Web)
- PDF – DOWNLOAD PDF (STN Express only)

=> FIL RDISCLOSURE
=> S ?MI CROCONTROLLER?
L1          71 ?MI CROCONTROLLER?
RUSSIAPAT contains all drawings from the full text. The formats GI, ALLG and MAXG, as in other patent databases, display the title page image only. ALLG and MAXG additionally display this information on the images:

<table>
<thead>
<tr>
<th>GINF</th>
<th>TYPE</th>
<th>FORMAT</th>
<th>COUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
<td>GI.FP</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Draw. Pages</td>
<td>GI.DRW</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Embedded</td>
<td>GI.EM</td>
<td></td>
<td>94</td>
</tr>
</tbody>
</table>

GI.S 17339
GI.S.EM 2661; 2661; 1755; 3419; 911; 361; 643; 361; 361; 797; 361; 325; 253; 917; 325; 325; 311; 325; 325; 323; 323; 929; 1075; 505; 395; 325; 841; 1635; 445; 451; 439; 325; 29969; 325; 395; 329; 395; 395; 399; 305; 325; 309; 395; 325; 325; 325; 325; 395; 1735; 1891; 457; 393; 317; 887; 529; 945; 967; 395; 635; 741; 721; 1449; 837; 721; 389; 389; 353; 407; 769; 909; 921; 851; 851; 577; 777; 585; 789; 857; 959; 961; 1049; 651; 953; 997; 793; 653; 949; 975; 917; 397; 397; 397; 397

GI.S.DRW 9989; 18915; 18409; 6089; 19787; 13699

FIELD: coding in communication systems.

SUBSTANCE: proposed partial reverse bit-order interleaver (P-RBO) functions to sequentially column-by-column configure input data stream of size N in matrix that has 2m lines and (J - 1) columns, as well as R lines in J column, to interleave configured data, and to read out interleaved data from lines.

EFFECT: optimized interleaving parameters complying with interleaver size.

4 cl, 7 dwg, 3 tbl

To retrieve the other images the display fields GI.DRW and GI.EM must be used.

The number of images can be obtained with the 3 counter fields: /GIN (/GIN.FP), /GIN.DRW and /GIN.EM.
Types of search

50  Full text

50.1  Searches in full-text databases

Bibliographical databases, having meaningful titles, abstracts, and advanced indexing, are still the best sources for searching prior-art publications. Anyway, full-text databases offer a number of options to either complement the bibliographical databases or use them alone for searching by text (see “Text searches”):

**Comprehensive text coverage.** This may be an advantage or a drawback.

Full-text databases hold a lot of unweighted text, which will tend to increase the number of hits and at the same time decrease the relevance of the search results. To increase the relevance of the documents found proximity operators should be used a lot. The FOCUS and DISPLAY OCCURRENCES commands should also be employed to identify relevant documents. Another way is to use selected search fields, e.g. /TI, /AB, /CLM, rather than searching the full text.

On the other hand the comprehensive text coverage has the advantage that certain search terms, such as proper names, very current or specific wordings, etc., will only appear here. This feature is often used when searching for prior art to be used in an opposition. It may also be that the otherwise very good indexing in bibliographical databases is less appropriate for certain fields of technology, e.g. if the field of search is a very new or dynamic one. Full-text databases can be very helpful in these circumstances.

In CNFULL and JPFULL, machine-translated titles and abstracts in English are entered first or the texts of equivalent publications are used. These texts are replaced with human-translated titles and abstracts (CN, JPA) after three months. The descriptions and claims are machine-translated.

Numeric Property Search (NPS) provides the opportunity to search numerical information in patent documents in the context of the full text. Because the numerical data are indexed in the continuous text of the document the proximity operators known from text search can be used to link numerical data with keywords. This search option has so far been implemented in the AUPATFULL, CANPATFULL, CNFULL, JPFULL and PCTFULL full-text databases.

**Timeliness.** Full-text databases either import the machine-readable text provided by the patent offices or they make use of an OCR (Optical Character Recognition) software to produce the full text. As the documents are not edited manually they can be made available very quickly. Thus, full-text databases are often used at the same time as bibliographical databases to cover very recent publications.

**Additional bibliographic information.** Full-text databases even offer extensive bibliographical information from the original documents, such as the addresses of applicants, inventors, or legal representatives.

Full-text searches are often performed as multi-file searches (e.g. in PCTFULL, EPFULL, PATDPAFULL). The search result is likely to include a number of publications from the same patent family, which should be combined using their priority numbers. However, the priority numbers in full-text databases are often not in standard format, which makes it necessary to use either INPADOCDB or INPAFAMDB to identify the patent families. The “Multi-file” and the “Family” search examples illustrate this strategy.

The following table gives an overview of the contents and search options in full-text databases:

<table>
<thead>
<tr>
<th>Database</th>
<th>Contents</th>
<th>Language</th>
<th>SLART</th>
<th>Images</th>
<th>NPS*</th>
<th>LS / FAM</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUPATFULL</td>
<td>1964- AUA, AUB, AUC, AUD, AUS</td>
<td>EN</td>
<td>BI, TI, AB, CLM, MCLM</td>
<td>Yes</td>
<td>Yes</td>
<td>LS/FAM Disp</td>
<td>IPC, CPC, EPC, ICO, IDT</td>
</tr>
<tr>
<td>CANPATFULL</td>
<td>1920- CAA, CAB, CAC, CAE, CAF</td>
<td>EN, FR</td>
<td>BI, TI, AB, CLM, MCLM</td>
<td>Yes</td>
<td>Yes</td>
<td>LS/FAM Disp</td>
<td>IPC, CPC, EPC, ICO, IDT</td>
</tr>
<tr>
<td>CNFULL</td>
<td>1985- CAN, CNB, CNC, CNK1, CNK2, CNU, CNY</td>
<td>EN</td>
<td>BI, TI, AB, CLM, MCLM</td>
<td>Partly</td>
<td>Yes</td>
<td>LS/FAM Disp</td>
<td>IPC, CPC, EPC</td>
</tr>
<tr>
<td>DEFULL</td>
<td>1877- DEA, DEB, DEC, DET, DEU</td>
<td>DE, EN</td>
<td>BI, TI, AB, MCLM, CLM</td>
<td>Yes</td>
<td>Yes</td>
<td>LS/FAM Disp</td>
<td>IPC, CPC</td>
</tr>
</tbody>
</table>
Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>Database</th>
<th>Contents</th>
<th>Language</th>
<th>SLART</th>
<th>Images</th>
<th>NPS*</th>
<th>LS / FAM</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPFULL</td>
<td>1978-</td>
<td>DE, EN, FR</td>
<td>BI, CLM, TI, AB, MCLM</td>
<td>Yes</td>
<td>No</td>
<td>LS Search LS/FAM Disp</td>
<td>IPC</td>
</tr>
<tr>
<td></td>
<td>EPA, EPB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRFULL</td>
<td>1900-</td>
<td>FR, EN</td>
<td>BI, TI, AB, CLM, MCLM</td>
<td>Yes</td>
<td>No</td>
<td>LS/FAM Disp</td>
<td>IPC, CPC, EPC, ICO</td>
</tr>
<tr>
<td></td>
<td>FRA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GBFULL</td>
<td>1840-</td>
<td>EN</td>
<td>BI, TI, AB, CLM, MCLM</td>
<td>Yes</td>
<td>No</td>
<td>LS/FAM Disp</td>
<td>IPC, CPC, EPC, ICO</td>
</tr>
<tr>
<td></td>
<td>GBA, GBB, GBC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFIALL**</td>
<td>1950-</td>
<td>EN</td>
<td>BI, TI, AB, CLM</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>IPC, NCL</td>
</tr>
<tr>
<td></td>
<td>USA, USB, USE, USH, USI, USP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INFULL</td>
<td>1912-</td>
<td>EN</td>
<td>BI, TI, AB, CLM, MCLM</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>IPC, CPC, EPC, ICO</td>
</tr>
<tr>
<td></td>
<td>INA, INA1, INE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JPFULL</td>
<td>1964-</td>
<td>EN</td>
<td>BI, TI, AB, CLM, MCLM</td>
<td>Yes</td>
<td>Yes</td>
<td>LS/FAM Disp</td>
<td>IPC, CPC, EPC, ICO</td>
</tr>
<tr>
<td></td>
<td>JPA, JPB, JPU, JPK, JPY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDPAFULL</td>
<td>1987-</td>
<td>DE, EN</td>
<td>BI, TI, AB, CLM, MCLM</td>
<td>Yes</td>
<td>No</td>
<td>LS/FAM Disp</td>
<td>IPC</td>
</tr>
<tr>
<td></td>
<td>DEA, DEB, DEC, DET, DEU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCTFULL</td>
<td>1978-</td>
<td>DE, EN, ES, FR</td>
<td>BI, TI, AB, CLM, MCLM</td>
<td>Yes</td>
<td>Yes</td>
<td>LS/FAM Disp</td>
<td>IPC, CPC, EPC</td>
</tr>
<tr>
<td></td>
<td>WOA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td>1960-</td>
<td>DE, EN, FR, SV</td>
<td>BI, TI</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>IPC, ECLA</td>
</tr>
<tr>
<td>USPATALL**</td>
<td>1790-</td>
<td>EN</td>
<td>BI, AB, TI, CLM, ECLM</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>IPC, CPC, NCL</td>
</tr>
<tr>
<td></td>
<td>1975-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2001-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA, USB, USE, USH, USI, USP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* NPS – Numeric Property Search
** IFIALL and USPATALL contain CAS Indexing. IFIALL contains Uniterm Codes.

50.2 Accessing the full text

Basically, there are two ways to get the full text of a patent document:

- Display the documents in ASCII format in one of the full-text databases (AUPATFULL, CANPATFULL, CNFULL, EPFULL, FRFULL, GBFULL, IFIALL, INFULL, JPFULL, PATDPAFULL, PCTFULL, RDISCLOSURE, USPATFULL, USPAT2, USPATOLD)
- Display the page images of a document (RDISCLOSURE)
- Display or order the full document using the FULLTEXT link

STN Express or STN on the WEB can be used. An Internet browser has to be installed on the computer.

50.2.1 Displaying documents from full-text databases

The full text of patent publications is stored in the AUPATFULL, CANPATFULL, CNFULL, EPFULL, FRFULL, GBFULL, IFIALL, INFULL, JPFULL, PATDPAFULL, PCTFULL, RDISCLOSURE, USPATFULL, USPAT2 and USPATOLD databases (in IFIALL only the claims of US patents). It can be displayed online or printed directly. For information on the contents and time coverage see the database descriptions and on transferring patent images see section “Patent images”.

An Optical Character Recognition (OCR) software is used to create the texts in the AUPATFULL, CANPATFULL, CNFULL, FRFULL, GBFULL, INFULL, JPFULL, PCTFULL und USPATOLD databases. This means that there may be spelling errors and text portions may be incomplete. A small number of documents have no text at all due to errors in the scanning process.

In PCTFULL the line length should be set to 100 to display the full text of a document in order to prevent unnecessary line breaks:

=> SET LINELENGTH 100

Once the display is complete the line length should be reset to the usual 80.
Types of search

50.2.1.1 Using DISPLAY BROWSE

DISPLAY BROWSE can be used to browse a number of answers in order to check their relevance before the full text is displayed. It is especially useful that an answer set can be browsed in any order and even repeatedly. For each document displayed the most costly display format used is charged once. Documents can be tagged and combined into a new answer set with high relevance (see the reference sheet for the STN search language).

```plaintext
=> FIL EPFULL
=> S MOUSETRAP?
L1 16 MOUSETRAP?

=> D BRO
:*TI
:1-6

L1 ANSWER 1 OF 16 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN
TIEN Animal trap.
TIFR Piege pour animaux.
TIDE Tierfalle.

L1 ANSWER 2 OF 16 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN
TIEN AUTOMATIC MOUSETRAP.
TIFR SOURICIERE AUTOMATIQUE.
TIDE AUTOMATISCHE MAUSEFALLE.

.. : 1 6 8 9 HIT
...
:TAG 1 8
ANSWER 1 TAGGED
ANSWER 8 TAGGED
:END

=> SORT TAG
ENTER (L1), L#, OR L# RANGE:
ENTER SORT FIELDS AND SORT DIRECTION (?): PD D
PROCESSING COMPLETED FOR L1
L2 2 SORT L1 TAG PD D

=> D 1-2 TI

L2 ANSWER 1 OF 2 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN
TIEN Animal trap.
TIFR Piege pour animaux.
TIDE Tierfalle.

L2 ANSWER 2 OF 2 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN
TIEN Center pivot door for a top load horizontal axis washing machine.
TIFR Porte a pivotement central pour machine a laver a axe horizontal.
TIDE Tuer mit zentralen Drehpunkt fuer eine von oben beschickbare mit waagerechter Achse arbeitende Waschmaschine.

=> SEL 1- PN
E1 THROUGH E2 ASSIGNED

=> D SEL
E1 1 EP1300077/PN
E2 1 EP869212/PN
```

The basic options are:

- Display documents from the answer set in any format
- Change the default format
- Display selected fields
- Tag documents for later sorting and processing

This is a short summary of options available:
Guide to STN Patent Databases

:dis         Display the next or first document in the default format
:1-4         Display answers 1–4 in the default format
:3, 7, 10    Display answers 3, 7, 10 in the default format
:*trial      Change the default format to TRIAL
:4 hit       Display answer 4 in HIT format
:tag         Tag current document for later sorting
:untag 10    Untag answer 10
:end         End DISPLAY BROWSE and return to the normal Messenger prompt (=>)

Additional options, e.g. string search, are available in USPATFULL/USPAT2:

:F3          Forward 3 fields
:B3          Back 3 fields
:S MOTOR     Search forward for the word ‘motor’ in the document
:S- MOTOR    Search backward for the word ‘motor’ in the document

50.2.2 FULLTEXT Link

A FULLTEXT link is available for every document in all bibliographical and full text databases if at least the bibliographical details are displayed. (There is no link if e.g. only the title is displayed.) When the link is clicked the ways STN offers to get the full text are displayed:

- Web-based document resources
  Page images can be downloaded free from Espacenet (European Patent Office, PDF) and from the USPTO (U.S. Patent and Trademark Office, single pages, TIFF).

- Fee-based document resources
  - Download document: The full text (single PDF file) can be downloaded immediately. A fee applies.
  - Order document: You can order the full text from FIZ AUTODOC (as a PDF file or printed). An order form will be displayed. A fee applies.

If any special software is needed to display images you will be alerted to this.

50.3 STN Viewer

Reading and evaluating patent publications is a very complex task. Considering the rising number of publications world-wide tools to support this task become increasingly valuable.
STN Viewer provides the tools necessary to quickly navigate in the full text of a patent publication, filter the key information, and identify the most relevant documents. It allows to arrange the essential search results and to add comments and evaluation results. The patent documents are linked to the original publications through ChemPort and to other information (CAPLUS family, INPADOCDB family) in order to quickly access additional information.

### 50.3.1 Making the documents available

Clicking the L number of an answer set of a patent search produces a menu with the option Evaluate with STN Viewer. When this is selected the equivalents to the documents retrieved (up to 1,000) will be made available from the following full-text patent databases: AUPATFULL, CANPATFULL, EPFULL, FRFULL, GBFULL, PATDPAFULL, PCTFULL, RDISCLOSURE, USPATFULL/USPAT2. (The system automatically changes to STNGUIDE first.)

Then STN Viewer is started in a web browser.

All documents that were not found in the full-text patent databases are combined into a special L number and can be displayed in the normal way.

### 50.3.2 Navigating the patent full texts

Once you are logged in using your LoginID and password the number of records in the Patent Queue (a sort of incoming folder) is displayed.

It is recommended to create a new project to transfer all records from the Patent Queue.

When all records have been transferred you can start to evaluate the patents. One of the most exciting options is to define and highlight (by colouring) important terms from the full text.
The Highlighting Map allows to easily find portions of the text with clusters of certain terms. Either individual sections (bibliographical details, claims, description) or the full document can be displayed. Also, the legal status (from CAPLUS and/or INPADOCDB) or other family members can be retrieved.

50.3.3 Administration of the document folders

By assigning ‘stars’ (from zero to three) you can value the documents by their relevance. This can then be used for sorting and filtering.

Labels allow to assign a ‘free-text’ classification on a project-to-project basis (e.g. cosmetic, pigment, eye care).

Types of search

The search results can be selectively arranged, complemented with comments and assessments, and shared with other users in your company or work group (Shared Project). A ‘LoginID for Shared Projects’ is needed for this.
51 Patent statistics

51.1 Introduction

To create useful patent statistics – time series, inventor and applicant statistics, country statistics, technology field statistics, citation statistics – there are a number of preconditions:

- **Suitable databases.** The required fields must be available. They must be consistently filled throughout the time period to be analyzed. They must be filled in such a way that the entries are useable, i.e. they need to be structured and standardised. Multiple entries in one field should not occur.

- **Good database knowledge.** The databases are differently suitable for patent statistics. National patent databases are suitable only for statistics concerning a particular country while using international databases patent statistics for several countries can be created. The dynamics concepts and family definitions of the databases should always be considered. Some databases contain only one document per national publication sequence, others include further publications of the same patent application in various ways. In this case the suitable fields must be chosen, e.g. to include into the analysis only the latest document of the national publication sequence. The patent family size may also influence the statistics result. There are certain analyses, e.g. citation statistics, where only few databases are suitable at all.

- **Good searching knowledge.** A market or technology field analysis will always be preceded by a subject search using classification and text search. It is up to the searcher to either use the documents from an existing subject search or to prepare a special search strategy for the purpose of statistical analysis. A competitor analysis will always be preceded by a carefully performed name search.

- **Using suitable statistics tools.** STN International offers a number of tools:
  - SELECT can be used to create rankings. Creation and display of the lists can be tailored using a number of options.
  - ANALYZE and TABULATE can be used to create statistical tables, that may then be displayed, sorted and edited according to needs or that can be exported to Excel for post-processing.
  - Mit Analyze Plus werden die statistischen Tabellen inklusive Sortieren, Editieren und Visualisieren menügeführt erstellt.
  - Using ANALYZE Plus it is possible to create the statistical tables guided by menus, including sorting, editing, and visualization.
  - STN AnaVist is an interactive analysis and visualization tool. A precondition for this is that the data in the databases are standardised.

The first precondition for an analysis of patent applications or granted patents is a suitable sample. It is only with an appropriate search result that a meaningful result can be obtained with the statistics tools. Wrong documents in the search result will lead to a false analysis result and cause misinterpretations. One cannot point out often enough that a profound knowledge of the databases and search strategies is indispensable to perform statistical analyses. It is only too often that errors are found even in the technical literature.

Below the STN tools for patent statistics are presented and their uses for the creation of statistical analyses are discussed. The tools are either used on-line (in part the free STNGUIDE database can be used) or the tables and diagrams can also be edited off-line. There may be fees for connect time to the databases and in some cases for use of the tools, but there is no need to download, and thus pay for, the documents to be analysed.

51.2 The SELECT command

The SELECT command extracts terms from source documents, counts their occurrences, and creates a list of terms ordered by descending occurrence.

```plaintext
=> SET ICFORMAT ON
=> SEL L1 1. IPC.F E1 THROUGH E438 ASSIGNED
```

The command is used with the following parameters:
Types of search

**L**
- The L number of the documents to be used (default: the latest L number).

**I**
- Documents to be used for the command, in this case all documents.

**IC**
- The field from which to select, here: IPC (default is file-specific, mostly Title); up to five fields separated by commas can be specified, however, only one E-numbered list will be created.

(SET ICFORMAT ON is needed if the IPC8 is used.)

There are a number of options that can be used together with the SELECT command:

**WITH "..."** to select only those terms containing the string given in quotation marks.

**NOT "..."** to select only those terms, which do not contain the string given.

**LEN n** to cut off all selected terms after n characters.

```plaintext
=> SET ICFORMAT ON
SET COMMAND COMPLETED
=> SEL 1. IPC.F WITH "G01" LEN8
E1 THROUGH E47 ASSIGNED
```

SELECT creates an E-numbered list (EXPAND list). The entries are sorted by their number of occurrence in the documents. The result of the SELECT command can be viewed using the D SEL command. It is possible to limit the display to certain entries of the list, e.g. to the first ten E numbers by D SEL E1-10.

```plaintext
=> D SEL E1-10
E1 315 G01G0021/IPC
E2 226 G01G0023/IPC
E3 130 G01G0007/IPC
E4 67 G01G0019/IPC
E5 45 G01G0003/IPC
E6 28 G01G0005/IPC
E7 26 G01L0001/IPC
E8 20 G01N0015/IPC
E9 13 G01G0009/IPC
E10 13 G01N0005/IPC
```

The SELECT command should only be used on one criterion, i.e. the search result needs to be restricted accordingly before SELECT is applied. For example, to obtain a time series for a number of patent assignees the search result to be used for this analysis needs to be split up by the names (by SEARCH commands) and each of the resulting parts has to be SELECTed separately. (Basically, up to five SELECT fields can be used in a single SELECT command, but all the terms selected this way are counted independent from each other. Thus, selecting the year and patent assignee name will produce both a time series and a ranking of names, but not the desired time series by individual assignees.)

The result of a SELECT command—much like the EXPAND result—can be used to continue the search by entering the appropriate E numbers in a SEARCH command.

A SELECT invalidates any E numbers previously obtained by EXPAND. In successive SELECT applications, the lists are appended to the respective end of the previous SELECT result. A new EXPAND command in turn deletes the E numbers of a previous SELECT. This behaviour can be changed by the command SET EXP CONT, which causes any new E-numbered list to be appended to an existing one. The E numbers can be deleted explicitly with DEL SEL.

### 51.3 The ANALYZE command

The ANALYZE command creates an L number containing the result of the analysis. No E numbers are assigned. For ANALYZE the same parameters and options can be used as for SELECT.

```plaintext
=> FIL WPINDEX
=> E SYMRISE/PA
```
To view the result, use the DISPLAY command. A table is displayed that shows

- The current number of the entry,
- Its frequency of occurrence,
- The number of documents where it occurs,
- The percentage of documents where it occurs, and
- The extracted entry itself.

Several fields may be selected with one ANALYZE command. If the LENGTH option is used the respective field should be in the first position. The WITH option cannot be used as it would apply to all fields used.

Then the individual lists may be displayed separately. (This can be done in the STNGUIDE file.)
There are various options to display the result obtained with ANALYZE:

- **1** displays all entries; default the first 10 entries,
- **TOP n** displays the n entries with the highest frequency of occurrence,
- **OGT n** displays all entries with a frequency of occurrence exceeding n,
- **DGT n** displays all entries that were found in more than n documents,
- **%GT n or PGT n** displays all entries found in more than n per cent of the documents,
- **WITH "..."** displays entries containing the quoted string,
- **NOT "..."** displays entries that do not contain the quoted string.

These options govern the order in which the result is displayed:

- **DOCUMENT** sorts the list by number of documents, in which the terms occur,
- **PERCENT** sorts the list by percentage,
- **ALPHABETIC** sorts the list in alphabetical order,
- **OCC** sorts by number of occurrence of the terms.

The sort order may be ascending (A) or descending (D).

The Term Numbers may be reassigned when the result is re-sorted, e.g. when sorting by years (this should be considered when the search is continued).

A specific sort sort function remains valid until a new sort sort function is specified.
Further options influence the appearance of the displayed data:

**ANS** shows a list of answer numbers for each term (Exception: display fields that include key identifying information such as patent numbers, accession numbers, and CAS Registry Number® identifiers);

**DETAIL** shows the terms with appended field tags (particularly useful if multiple fields have been selected);

**DELIMITED** shows the data in a delimited format appropriate for automatic processing (e.g. to enter the data into a spreadsheet to create a chart).

### 51.3.1 Using an ANALYZE result for searching

An ANALYZE result can easily be used for a further search or analysis. The following options are available:

1. Apply SEARCH to the L number or TRANSFER to all terms of the L number of the ANALYZE result, e.g. to transport the terms to another database,

2. Apply TRANSFER to some terms of the ANALYZE result or to a subset limited by one of the options DGT, OGT, PGT, TOP, WITH, or NOT.

3. Apply SELECT to the L number of the ANALYZE result. The same options as above (2) may be used. The result will be an E-numbered list that can be used in the same way as any other E-numbered list.

**Example:** Using the result of L3, further analysis is to be done. The new base to be used are the patents of Symrise in the technologies represented by the 10 most frequent classifications (Subclasses). Variant 3 is used first:

```plaintext
=> FIL WPINDEX

=> D IPC.F
L3 ANALYZE L1 IP F Pryf Pr Pc S IN LEN 4 : 814 TERMS

TERM #   # OCC # DOC % DOC IPC.F Pryf Pr Pc S
------   ------ ------ -------- ------ ------ ------
120       155   155   32.09 A61K
131        73    73   15.11 C07C
132        71    71   14.70 A23L
150       32     32   6.63 C07D
163       21     21   4.35 C10L
170       18     18   3.73 C11B
183       14     14   2.90 A61Q
192       11     11   2.28 C11D
203        9      9   1.86 A23G
204        9      9   1.86 B01J
```

```plaintext
=> SEL L3 120 131 132 150 163 170 183 192 203 204
E1 THROUGH E10 ASSIGNED

=> S E1-E10/IPC AND L1
L4 457 (A61K/IPC OR C07C/IPC OR A23L/IPC OR C07D/IPC OR C10L/IPC OR C11B/IPC OR A61Q/IPC OR C11D/IPC OR A23G/IPC OR B01J/IPC) AND L1

(In place of SELECT another ANALYZE could have been used.)

Using TRANSFER (Variant 2) the same result is obtained this way. As IPC.F is not a search field the correct search field needs to be inserted:

```plaintext
=> TRANSFER L3 117 119 127 137 138 150 174 175 176 183
L5 TRANSFER L3 120,131,132,150,163,170,183,192,203,204 : 10 TERMS
‘IPC.F’ IS NOT A VALID FIELD CODE
L6 0 L5

=> S L5/IPC AND L1
ALL TERMS IN L5/IPC RETRIEVED.
L8 457 L7 AND L
```
51.3.2 Editing an ANALYZE result

It often occurs that for example a patent assignee pops up with a number of variations of his name in the documents and thus in the ANALYZE result.

```latex
=> FIL EPFULL
=> S B41F/IPC AND PRY>=2002
L1  4018 B41F/IPC AND PRY>=2002

=> ANALYZE L1 1- PA PRY PRC
L2  ANALYZE L1 1- PA PRY PRC : 1196 TERMS

=> FIL STNGUIDE

=> D L2 PA
L2  ANALYZE L1 1- PA PRY PRC : 1196 TERMS
TERM #  # OCC  # DOC  % DOC  PA  PRY  PRC
-------  ------  -------  -------  ----  ----  -----  
12      446    446     11.10 MANROLAND AG
13      400    400     9.96 KOENIG & BAUER AKTIENGESELLSCHAFT
18      164    164     4.08 KOMORI CORPORATION
21      104    104     2.59 KOENIG & BAUER AG
24      79     79     1.97 GOSS INTERNATIONAL AMERICAS, INC.
25      78     78     1.94 WNDMOELLER & HOELSCHER KG
26      73     73     1.82 KBA · NOTASYS SA
27      66     66     1.64 WIFAG MASCHINENFABRIK AG
28      61     61     1.52 MITSUBISHI HEAVY INDUSTRIES, LTD.
29      56     56     1.39 KBA · GIORI S.A.

In an ANALYZE result, these list entries can be combined using the EDIT command. It is a good idea to display and edit the list in the STNGUIDE file (no connect hour charges). To find all the different spellings of the names the Patent Assignee lists have to be displayed in full:

```latex
=> EDIT L2
ENTER (CHANGE), COMBINE, OR TITLE: COMBINE
ENTER PREFERRED TERM NUMBER OR (?): 12
PREFERRED TERM: MANROLAND AG/PA
ENTER EQUIVALENT TERM NUMBERS OR (END): 30 46 62
EQUIVALENT TERM: MANROLAND SHEETFED GMBH/PA
EQUIVALENT TERM: MAN ROLAND DRUCKMASCHIENFABRIK AG/PA
EQUIVALENT TERM: MANROLAND WEB SYSTEMS GMBH/PA
ENTER EQUIVALENT TERM NUMBERS OR (END):.
APPLY CHANGES? (Y)/N: Y
TERMS COMBINED

=> D L2 PA
L2  ANALYZE L1 1- PA PRY PRC : 1196 TERMS
(AFTER EDITS : 1193 TERMS)
TERM #  # OCC  # DOC  % DOC  PA  PRY  PRC
-------  ------  -------  -------  ----  ----  -----  
9@      537    537    13.36 MANROLAND AG
13      400    400     9.96 KOENIG & BAUER AKTIENGESELLSCHAFT
18      164    164     4.08 KOMORI CORPORATION
21      104    104     2.59 KOENIG & BAUER AG
24      79     79     1.97 GOSS INTERNATIONAL AMERICAS, INC.
25      78     78     1.94 WNDMOELLER & HOELSCHER KG
26      73     73     1.82 KBA · NOTASYS SA
27      66     66     1.64 WIFAG MASCHINENFABRIK AG
28      61     61     1.52 MITSUBISHI HEAVY INDUSTRIES, LTD.
29      56     56     1.39 KBA · GIORI S.A.

@ INDICATES TERM AFFECTED BY MOST RECENT EDITS
```

All entries of all relevant patent assignees should be edited in this way. In a following DISPLAY the entries that were edited are marked.
Guide to STN Patent Databases

If EDIT COMBINE is repeated note that the term numbers change. Thus, the patent assignee list has to be displayed repeatedly to use the correct term numbers.

In this example note that there are two variations of the name KOENIG & Bauer Aktiengesellschaft in 652 documents, but 654 hits. This means that there are two documents where both variations of the name occur. This is reflected in the new list:

```plaintext
=> D L2 PA DOC
L2 ANALYZE L1 PA PRY PRC : 1196 TERMS
(AFTER EDITS : 1167 TERMS)

TERM #  # OCC # DOC  % DOC PA PRY PRC
-------- -------- -------- -------- --------
 4* 654  652 16.23 KOENIG & BAUER AKTIENGESELLSCHAFT
10* 545  545 13.56 MANROLAND AG
17* 167  167  4.16 KOMORI CORPORATION
19* 162  162  4.03 GOSS INTERNATIONAL AMERICAS, INC.
22* 114  114  2.84 MITSUBISHI HEAVY INDUSTRIES, LTD.
23* 104  104  2.59 HEIDELBERGER DRUCKMASCHINEN AKTIENGESELLSCHAFT
26*  82  82   2.04 WINDMOELLER & HOELSCHER KG
27   66  66  1.64 WIFAG MASCHINENFABRIK AG
28*  57  57  1.42 TECHNOTRANS AG
29*  52  52  1.29 BALDWIN N. JAPAN LTD.

* INDICATES TERMS AFFECTED BY PREVIOUS EDITS

Use EDIT CHANGE to e.g. shorten very long names:

```plaintext
=> EDIT L2
ENTER {CHANGE}, COMBINE, OR TITLE:. ENTER TERM NUMBERS OR (ALL):.
ENTER STRING TO BE REPLACED OR {END}: AKTIENGESELLSCHAFT ENTER REPLACING STRING OR {NONE}: AG ...

=> D PA
L2 ANALYZE L1 PA PRY PRC : 1196 TERMS
(AFTER EDITS : 1167 TERMS)

TERM #  # OCC # DOC  % DOC PA PRY PRC
-------- -------- -------- -------- --------
 4* 654  652 16.23 KOENIG & BAUER AG
10* 545  545 13.56 MANROLAND AG
17* 167  167  4.16 KOMORI CORPORATION
19* 162  162  4.03 GOSS INTERNATIONAL
22* 114  114  2.84 MITSUBISHI HEAVY IND
23@ 104  104  2.59 HEIDELBERGER DRUCK AG
26*  82  82  2.04 WINDMOELLER & HOELSCHER KG
27   66  66  1.64 WIFAG MASCHINENFABRIK AG
28*  57  57  1.42 TECHNOTRANS AG
29*  52  52  1.29 BALDWIN N. JAPAN LTD.

@ INDICATES TERM AFFECTED BY MOST RECENT EDITS
* INDICATES TERMS AFFECTED BY PREVIOUS EDITS

350
Types of search

51.4 SELECT or ANALYZE?

Whether to use SELECT or ANALYZE depends on the search or statistics problem at hand.

<table>
<thead>
<tr>
<th></th>
<th>SELECT</th>
<th>ANALYZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply to results from one single database</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Apply to results from a Multi-file search</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Maximum number of terms/documents to extract</td>
<td>999 E numbers</td>
<td>50 000 documents</td>
</tr>
<tr>
<td>Display of details:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of occurrences</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Number of documents</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Percentage of documents</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Answer numbers for extracted terms</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Sorting of display:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>By number of occurrences</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>By number of documents</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>By percentage of documents</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Alphabetical/alphanumeric</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Combining of terms/variations</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Use of extracted terms for a search:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All terms</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Selected terms</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td>variable (and dependent on the file)</td>
<td>variable (price dependent on number of documents treated)</td>
</tr>
</tbody>
</table>

Caution: In CA/HCA/CAplus/HCAplus/ZCA/ZCAplus the charges for each SELECT are considerable (for fields from both patent or non-patent documents). Consider preferring ANALYZE.

Note: To create patent statistics including graphical representations the ANALYZE PLUS function of STN Express is most useful.

51.5 Displaying a results table – TABULATE

By using the TABULATE command the data from two fields of an ANALYZE result can be displayed in a tabular format (this goes also for an already edited result). This way it is possible to see e.g. a list of patent assignees and the number of their applications over time.

When entering a TABULATE command it has to be specified whether the result is to be displayed in a tabular format or as a delimited list (for later processing by a spreadsheet or presentation program, e.g. Excel). It is not possible to get both types of display by just one TABULATE command.

Tabular format:

```plaintext
=> TABULATE L2 PA PR
```

Delimited format:

```plaintext
=> TABULATE L2 PA PR DELIMITED
```

For the tabular format again there are two options:

- Default format
- GRID

TABULATE should be used in beginner’s mode. For later processing, e.g. by Excel, the GRID format can be used. This format displays a two-dimensional table, displaying the terms of the primary display code in rows and the terms of the secondary code in columns. The number of documents for each combination of terms is displayed in the respective intersection.

```plaintext
=> TABULATE L2
DISPLAY AS GRID FORMAT (N), Y, OR ?: Y
ENTER PRIMARY DISPLAY CODE OR (?): PA
ENTER SECONDARY DISPLAY CODE OR (?): PRY
DISPLAY PRIMARY (TOP 10), ENTIRE OR ?:.
PRIMARY SORT ORDER (CURRENT), DOC, ALPHA, OR ?: DOC
```
For the sort order the default should be used, or else these rules be observed in order to obtain a useful display:

- Doc (sort by number of documents) → D (descending)
- Alp (alphabetical order) → A (ascending)

The table can be resorted without extra cost. If the same data is wanted in DELIMITED format a new TABULATE command must be entered, though.

```
TERM # # DOC  % DOC    PA
-------- -------- --------- --------
 2  652 16.23  KOENIG & BAUER AG
   2  0.05   --        2012
   16  0.40   --        2011
  27  0.67   --        2010
  25  0.62   --        2009
  40  1.00   --        2008
  64  1.59   --        2007
  91  2.26   --        2006
  72  1.79   --        2005
  99  2.46   --        2004
  99  2.46   --        2003
  6  545 13.56  MANROLAND AG
   1  0.02   --        2012
  10  0.25   --        2011
  17  0.42   --        2010
  45  1.12   --        2009
 101  2.51   --        2008
 123  3.06   --        2007
 104  2.59   --        2006
  87  2.17   --        2005
  59  1.47   --        2004
  19  0.47   --        2003
```

REFORMAT USING SAME DISPLAY FIELDS? (N), Y, OR ?: Y

...
## Types of search

### 51.5.1 Using the results in a spreadsheet program

If the statistical data are to be processed in a spreadsheet program the DELIMITED format should be used:

```plaintext
=> TABULATE L2 DELIMITED
DISPLAY AS GRID FORMAT (N), Y, OR ?: N
ENTER PRIMARY DISPLAY CODE OR ?: PA
ENTER SECONDARY DISPLAY CODE OR ?: PRY
DISPLAY PRIMARY (TOP 10), ENTIRE OR ?: :ENTIRE
PRIMARY SORT ORDER (CURRENT), DOC, ALPHA, OR ?: DOC
PRIMARY SORT DIRECTION (DEFAULT), A, D, OR ?: D
SECONDARY SORT ORDER (CURRENT), DOC, ALPHA, OR ?: ALPH
SECONDARY SORT DIRECTION (DEFAULT), A, D, OR ?: D
L2 ANALYZE L1 PA PRY PRC: 1196 TERMS
       (AFTER EDITS: 1167 TERMS)

2; 0.05; KOENIG & BAUER AG; 2012
16; 0.40; KOENIG & BAUER AG; 2011
27; 0.67; KOENIG & BAUER AG; 2010
40; 1.00; KOENIG & BAUER AG; 2008
64; 1.59; KOENIG & BAUER AG; 2007
91; 2.26; KOENIG & BAUER AG; 2006
72; 1.79; KOENIG & BAUER AG; 2005
99; 2.46; KOENIG & BAUER AG; 2004
99; 2.46; KOENIG & BAUER AG; 2003
165; 4.11; KOENIG & BAUER AG; 2002
37; 0.92; KOENIG & BAUER AG; 2001
1; 0.02; MANROLAND AG; 2012
10; 0.25; MANROLAND AG; 2011
17; 0.42; MANROLAND AG; 2010
45; 1.12; MANROLAND AG; 2009
101; 2.51; MANROLAND AG; 2008
123; 3.06; MANROLAND AG; 2007
104; 2.59; MANROLAND AG; 2006
87; 2.17; MANROLAND AG; 2005
59; 1.47; MANROLAND AG; 2004
19; 0.47; MANROLAND AG; 2003
30; 0.75; MANROLAND AG; 2002
1; 0.02; MANROLAND AG; 2001
1; 0.02; KOMORI CORPORATION; 2012
15; 0.37; KOMORI CORPORATION; 2011
13; 0.32; KOMORI CORPORATION; 2010
7; 0.17; KOMORI CORPORATION; 2009
17; 0.42; KOMORI CORPORATION; 2008 ...

REFORMAT USING SAME DISPLAY FIELDS? (N), Y, OR ?: N

This table with the 'semicolon' as separator can easily be copied to the spreadsheet program (in this example Excel) and be processed there.

**Procedure:**

- Copy to Excel (Select/Copy/Paste)
- Make a spreadsheet (Data/Text in columns/Separator: Semicolon, Delete % column, Delete empty column, Enter column titles)
- Make a PIVOT table (Data/PIVOT table)
- Make a 3D diagram (Diagram wizard, show diagram on a new sheet, copy diagram and paste it e.g. to Word)
## 51.6 Using STN Express

STN Express has two tools for analyses (from version 7.0):

- **ANALYZE**:
  - To analyse one or two fields from an answer set
  - To create diagrams

- **ANALYZE PLUS**:
  - To analyse one or two fields from an answer set
  - To group/edit the lists and save the results
  - To create diagrams and an interactive Excel matrix; displaying STN documents is possible
Types of search

- To save tabular data (.TBN) for off-line or on-line processing in order to create new diagrams (from version 8.0)

An example using ANALYZE PLUS is shown here:

```plaintext
=> FIL WPINDEX
=> S B60R0021-01+NT/IPC AND PRYF>=1998
L1 4383 B60R0021-01+NT/IPC AND PRYF>=1998
```

Click on the L number (L1) to produce a menu where ANALYZE PLUS is selected. (There is also an option in the menu to save the search result for processing with the STN Anavist software: Save for STN Anavist.)

This calls the Analyze Plus Wizard (STN Express 8.0):

Here you can choose between

- One field analysis
- Two field analysis

For our example choose Two field analysis (a One field analysis example see the “ANALYZE” search example). Further the fields to be analysed are selected. Some of these are shown in the window; if the desired field is not shown here it can be added by clicking Options.

Group similar terms should always be activated when the Patent Assignee is analysed; this will automatically group similar Patent Assignee names.

Capture delimited tabulation data for later use should be activated if you are going to create off-line or on-line Excel files or if you wish to group/edit the lists off-line.
This is the Options window:

Here you can enter the desired fields as Custom fields. For Terms to view 10 is selected. The sort order for the Patent Assignee should be by frequency, and for the Priority Year alphanumerically. Click OK when ready. The previous window will reappear and you can click ANALYZE. If Capture delimited tabulation data for later use was activated a Save as dialog will appear to create a .TBN file which is used to save the statistics results.

Then the analysis is performed. If Two field analysis was selected a TABULATE will be done. This may take some time, in particular with big answer sets. After that the Excel files and Excel diagrams are created. For this the system automatically changes to the STNGUIDE file (free of charge).

The Data Group Tool shows all Patent Assignee names, even if only the top 10 names were wanted. The reason for this is shown below. After the analysis or when the TBN file is opened this window will open to group the first field:

The Patent Assignee Code / Patent Assignee present in the answer set are listed in alphabetical order. Having activated Group similar terms in the Analyze Plus Wizard similar names have already been grouped automatically. This list should be checked and if necessary more names can be grouped here. The result can be saved with Save changes to data groupings. The list can then be edited off-line later and is immediately available for further analysis (in STN Express). Here is an example with grouped entries for ‘TRW’.
More information on grouping Patent Assignee names can be found in the search examples.

With Next the window for the second field is displayed:

No changes are needed here. Finish starts the creation of the Excel tables and diagrams.

Excel will be opened automatically and ‘Workbook 1’ (interactive) and ‘Sheet 1’ (Excel table only) will be created.

The table created, ‘Cross-Tab’, is interactive, i.e. you can click on a field to see the respective documents in a free format. Other formats to be displayed can be selected from a menu. (If you are off-line STN Express will automatically open the Login window to connect to STN.)
When you click on one of the above fields this window will be displayed:

The interactive diagram ‘3-D Column’ possibly just shows part of the picture where you can choose the start and end (see Excel’s menu). As our example is with 10 Patent Assignees only this diagram shows the complete picture. This diagram can be edited (e.g. delete lines, change colours, display a legend, etc.) or a different type of diagram be selected.
Other views/diagrams can be created easily (columns, bars, lines, circles, etc.):

A second Excel file is created that contains the raw data for processing. Here are the table and the diagram that can be opened:
Creating the diagrams from saved tabular data (STN Express from version 8.0):

The STN Online and Results menu offers for example:

- Edit Data Group File: to edit the grouped lists (PA, PAS, etc.) off-line if they were saved
- Create Analyze Plus chart from saved data: to start creation of new Excel tables and diagrams with the previously saved TBN file. This file contains all the tabular data and is not limited, e.g. to the most frequent Patent Assignees. So these data can be used to create completely new diagrams.

### 51.7 ANALYZE or ANALYZE PLUS?

By using the ANALYZE command one can analyse the data from a number of fields in one step and then display the results. There are several options for the analysis and to format the results display. Considerable time may be needed to edit table data (e.g. Patent Assignee names) and to create Excel tables and diagrams.

When using ANALYZE PLUS the fields to be analysed need to be dealt with individually. This is likely to cause higher on-line cost. Fewer sort options for the documents are available. Anyway, using the available tools the statistical analysis including any diagrams can be created quickly, minimising the required working time. This way good quality diagrams can be created even without in-depth knowledge of the Excel software.

#### 51.7.1 Combining the ANALYZE command and ANALYZE PLUS

- If you wish to perform analysis on several fields you may save cost by entering one ANALYZE command on all desired fields together in the first step. ANALYZE PLUS is then applied for each each desired visualization (One-Field-Analysis, Two-Field-Analysis). If you wish for example to analyse four fields (One Field Analysis) you will be charged 1 ANALYZE command plus 4 ANALYZE PLUS rather than 4 ANALYZE commands plus 4 ANALYZE PLUS.
- The Data Group function of ANALYZE PLUS lists all entries (e.g. Patent Assignee names) in alphabetical order only. This means there is no ranking and one would in theory have to edit all the names even if one is interested in the 20 most frequent companies only. Therefore you could first use the ANALYZE command and display the list sorted by rank. Then you start ANALYZE PLUS. When grouping you concentrate on the companies ranking highest. This procedure does not produce any extra charges.
- The charge for ANALYZE PLUS is applied when ‘Finish’ is clicked after the fields have been edited. If you cancel the command (e.g. due to an error) no charge applies. This is why it is also a good idea to first perform ANALYZE in order to keep any intermediate results.
51.7.2 Cost

<table>
<thead>
<tr>
<th>ANALYZE</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>1-1 000 answers</td>
<td>€20,15</td>
</tr>
<tr>
<td>Level 2</td>
<td>1 001-10 000 answers</td>
<td>€34,55</td>
</tr>
<tr>
<td>Level 3</td>
<td>10 001-50 000 answers</td>
<td>€53,65</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABULATE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>€58,15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANALYZE PLUS</th>
<th>Always follows an ANALYZE or TABULATE command</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>1-1 000 answers</td>
</tr>
<tr>
<td>Level 2</td>
<td>1 001-10 000 answers</td>
</tr>
<tr>
<td>Level 3</td>
<td>10 001-50 000 answers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANALYZE PLUS</th>
<th>One-field ANALYZE (Level 1, 2 or 3) + ANALYZE PLUS (Level 1, 2 or 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>= €54,70…126,30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANALYZE PLUS</th>
<th>Two-field ANALYZE (Level 1, 2 or 3) + TABULATE + ANALYZE PLUS (Level 1, 2 or 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>= €112,85…184,45</td>
</tr>
</tbody>
</table>

It is a good idea to first perform ANALYZE and then ANALYZE PLUS.

51.8 Summary: SELECT, ANALYZE, ANALYZE PLUS

51.8.1 SELECT

<table>
<thead>
<tr>
<th>Use:</th>
<th>Creation of rankings / time series from the search results in a database</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options:</td>
<td>Some options for display of lists</td>
</tr>
<tr>
<td>Maximum number of terms to be extracted / documents:</td>
<td>999 terms</td>
</tr>
<tr>
<td>Editing of tables:</td>
<td>Editing or sorting the lists, e.g. patent assignee names, is not possible</td>
</tr>
<tr>
<td>Using two or more criteria:</td>
<td>Only in succession</td>
</tr>
<tr>
<td>Visualization of results:</td>
<td>No special support for visualization or transfer to Excel</td>
</tr>
<tr>
<td>Functions to improve the relevance of the search result / sample:</td>
<td>The SELECT result can be used for further searching to obtain a new (more relevant) sample.</td>
</tr>
</tbody>
</table>

**Conclusion:** Because of its limited options in particular for the treatment and display of the results SELECT is rather a tool to improve a search strategy (e.g. to find appropriate classifications or keywords) than a real statistics tool.

51.8.2 ANALYZE / TABULATE

<table>
<thead>
<tr>
<th>Use:</th>
<th>Creation of statistical tables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options:</td>
<td>Many options for display and sorting of lists</td>
</tr>
<tr>
<td>Maximum number of terms to be extracted / documents:</td>
<td>50 000 documents</td>
</tr>
<tr>
<td>Editing of tables:</td>
<td>Editing the lists, e.g. patent assignee names, is possible</td>
</tr>
<tr>
<td>Using two or more criteria:</td>
<td>Criteria can be edited at the same time, two criteria can be displayed in one table.</td>
</tr>
<tr>
<td>Visualization of results:</td>
<td>Visualization and transfer of results to Excel is supported.</td>
</tr>
<tr>
<td>Functions to improve the relevance of the search result / sample:</td>
<td>The ANALYZE result can be used for further searching to obtain a new (more relevant) sample.</td>
</tr>
</tbody>
</table>

**Conclusion:** ANALYZE and TABULATE offer convenient options to create statistical tables. At the same time it is relatively inconvenient to edit the tables (e.g. patent assignee names). For post-processing and visualization a good knowledge of Excel or other software tools is needed.
Types of search

51.8.3 ANALYZE PLUS

| Use: | Menu based creation of statistical tables including visualization. |
| Options: | Necessary options for display and sorting of lists |
| Maximum number of terms to be extracted / documents: | 50,000 documents |
| Editing of tables: | Efficient editing of the lists, e.g. patent assignee names, is supported |
| Using two or more criteria: | One or two criteria can be edited and displayed in a table or diagram. |
| Visualization of results: | Visualizations can be created quickly and easily. Table data are available in Excel format for post-processing. |
| Functions to improve the relevance of the search result / sample: | ANALYZE PLUS should only be applied to the result of a search with an optimized search strategy. It can be used in combination with ANALYZE to treat and visualize a sample to obtain a new (and more relevant) one. |

Conclusion: ANALYZE PLUS is a convenient menu-guided option of the STN Express retrieval software to create statistical tables and diagrams. It makes editing the tables (e.g. patent assignee names) easy. It is recommended to combine ANALYZE Plus with the ANALYZE command.

51.9 Database dynamics and its influence on statistical analysis results

<table>
<thead>
<tr>
<th>Database</th>
<th>Dynamics principle used</th>
<th>Notes on statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Static principle</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAPIO</td>
<td>Unexamined applications only, one document for one Japanese application</td>
<td>No influence by updates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Useful for statistics of Japanese applications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No longer updated from 4/2013</td>
</tr>
<tr>
<td>KOREAPAT</td>
<td>Either unexamined application or granted patent, one document for one Korean application</td>
<td>No influence by updates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Useful for statistics of Korean applications</td>
</tr>
<tr>
<td>PCTFULL</td>
<td>Patent applications, One document for one international application</td>
<td>No influence by updates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Useful for statistics of international applications</td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td>One document for each Technical Disclosure</td>
<td>No influence by updates</td>
</tr>
<tr>
<td><strong>Dynamic principle</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INPAFAMDB</td>
<td>One document per patent family, new publications are added to the family.</td>
<td>Patent family (one document per invention) influences the statistical analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No influence by family size</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There is a PRYF field (Priority Year First) for the patent family/document</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Useful for a large variety of statistics problems</td>
</tr>
<tr>
<td>DWPI</td>
<td>One (sometimes more than one) document for each patent family, the fields are updated</td>
<td>Invention level: Patent family (usually one document per invention) goes into the analysis:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Influence of the family size is nearly eliminated (only if the family has numerous documents in DWPI this may influence the statistics result)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analysis can be limited to Basic Patents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There is a PRYF (Priority Year First) field for the whole patent family/the document</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Useful for a large variety of statistics problems Publication level:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The family size influences the statistics result if fields from the publication level are used</td>
</tr>
<tr>
<td>Database</td>
<td>Dynamics principle used</td>
<td>Notes on statistics</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| CAPLUS        | One (sometimes more than one) document for each patent family, the fields are updated   | Patent family (usually one document per invention) goes into the analysis:  
  - Influence of the family size is nearly eliminated (only if the family has numerous documents in DWPI this may influence the statistics result)  
  - Analysis can be limited to Basic Patents  
  - There is a PRYF (Priority Year First) field for the whole patent family/the document  
  - Useful for a large variety of statistics problems  
|               |                                                                                         |                                                                                                                                                                                                                      |
| PATDPA        | One document for each patent procedure, fields are updated or overwritten. More than one document may belong to the same patent family (DE, EP, WO, German application number for EP applications, translation of EP and WO documents). There may be separate documents of national family members (Internal Priority, Division, Division into Utility model, Additional patents, etc.) | The database has fields holding only data of the latest publication (PI, PK, etc.). Using these the influence of updates to the document may be eliminated. Other fields hold data of all publications (PI.M, PK.M, etc.).  
  - Each patent procedure goes into the analysis:  
  - The family size influences the statistics result  
  - The answer set to be analysed should be limited to one country and type of publication  
  - No longer updated from 7/2011  
|               |                                                                                         |                                                                                                                                                                                                                      |
| DPCI          | One (sometimes more than one) document for each patent family, the fields are updated   | It can be selected whether the updates of citations and the family size should go into the statistics (PNC – number of patents cited) or not (OSC – number of families cited).  
  - DWPI should be used for statistics using bibliographical data (completeness)  
  - Useful for citation statistics  
|               |                                                                                         |                                                                                                                                                                                                                      |
| FRANCEPAT     | One document for each patent procedure, fields are updated or overwritten                | There are no fields limited to the latest publication in the document. Even priorities are updated. Thus, the number of publications goes into the statistics result.  
  - No longer updated  
|               |                                                                                         |                                                                                                                                                                                                                      |
| Databases with segmentation                                                                                                                  |                                                                                                                                                                                                                      |
| INPADOCDB     | One document for each national, regional, or international patent procedure. In case of updates a new level is entered into the document. | The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
  - Each patent procedure goes into the statistics result:  
  - The family size influences the statistics result  
  - There is a PRYF (Priority Year First) field for the whole patent family (in some cases there may be more than one), each PRYF is counted per document  
  - The answer set to be analysed should be limited to one country and type of publication  
|               |                                                                                         |                                                                                                                                                                                                                      |
| AUPATFULL     | One document for one Australian patent procedure. In case of updates a new segment is entered into the document. | The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
  - Useful for statistics of latest publications  
|               |                                                                                         |                                                                                                                                                                                                                      |
| CANPATFULL    | One document for one Canadian patent procedure. In case of updates a new segment is entered into the document. | The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
  - Useful for statistics of latest publications  
|               |                                                                                         |                                                                                                                                                                                                                      |
| CNFULL        | One document for one Chinese patent procedure. In case of updates a new segment is entered into the document. | The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
  - Useful for statistics of latest publications  
|               |                                                                                         |                                                                                                                                                                                                                      |
| FULL          | One document for one German patent procedure. In case of updates a new segment is entered into the document. | The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
  - Useful for statistics of latest publications  
|               |                                                                                         |                                                                                                                                                                                                                      |
### Types of search

<table>
<thead>
<tr>
<th>Database</th>
<th>Dynamics principle used</th>
<th>Notes on statistics</th>
</tr>
</thead>
</table>
| EPFULL         | One document for the regional (EP) or international (Euro-PCT) patent procedure. In case of updates a new segment is entered into the document. | - The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
- Useful for statistics of latest publications |
| FRFULL         | One document for one French patent procedure. In case of updates a new segment is entered into the document. | - The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
- Useful for statistics of latest publications |
| GBFULL         | One document for one British patent procedure. In case of updates a new segment is entered into the document. | - The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
- Useful for statistics of latest publications |
| INFULL         | One document for one Indian patent procedure. In case of updates a new segment is entered into the document. | - The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
- Useful for statistics of latest publications |
| JPFULL         | One document for one Japanese patent procedure. In case of updates a new segment is entered into the document. | - The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
- Useful for statistics of latest publications |
| PATDD          | One document for one DD procedure. In case of updates a new segment is entered into the document. | - The fields hold data of the full database document, i.e. the same invention may go into the statistics result multiple times. |
| PATDPFULL      | One document for one German patent procedure. In case of updates a new segment is entered into the document. | - The database has fields holding only data of the latest publication (IN, PA, etc.), and others holding data of all publications (IN.M, PA.M, etc.).  
- Useful for statistics of latest publications |
| IFIALL         | A new document for each update of a US application or patent.                           | - Each member of the national patent family is entered into a new document (Continuation, Division, Reissue, etc.)  
- Each update level goes into the statistics result (maximum two)  
- A patent assignee is often not available for patent applications |
| Co-Database    |                                                                                         |                                                                                     |
| USPATFULL/USPAT2 | In case of an update a second document is entered into the co-database                 | - Each member of the national patent family is entered into a new document (Continuation, Division, Reissue, etc.)  
- Each update level goes into the statistics result (maximum two)  
- A patent assignee is often not available for patent applications |

### 51.9.1 Note on databases with segmentation

In these databases (INPADOCDB, PATDPFULL, EPFULL, and others) there are SELECT fields relating to the most recent publication only. These are the fields without an appended .M, e.g. IN, PA. For many of these fields there is an equivalent field with an appended .M, e.g. IN.M, PA.M. These always relate to all publications included in the record, i.e. all publications from the same patent procedure.

For the purposes of a statistical analysis one should prefer the fields relating to the most recent publication only so the varying number of publications does not go into the statistics result. The .M fields were omitted from the tables in the sections below for better clarity.
51.9.2 Note on databases with dynamic principle and family based documents
(DWPI, DPCI, CAPLUS and INPAFAMDB)

In these databases the PI field of a document contains the details for a whole patent family. It is possible to either include all family members into the statistical analysis or the Basic Patent only. To include the Basic only the fields with appended .B have to be used (DWPI and CAplus).

In CAPLUS there may be two Basics for applications from US, DE, GB, FR, CA or EP on the one hand and the corresponding WO application on the other (see the CAPLUS database description). A reference to the other document can be found in the SO field: Chemical Indexing Equivalent to... These “duplicate” documents should be removed from the answer set before performing any statistics:

- Remove the equivalent WO documents:
  
  ```
  => S 98-01-1/BUU AND P/DT
  L1       32 98-01-1/BUU AND P/DT
  
  => S L1 NOT (CHEMICAL INDEXING EQUIVALENT/SO AND WO/PC.B)
  L2       30 L1 NOT (CHEMICAL INDEXING EQUIVALENT/SO AND WO/PC.B)
  ```

- Remove the equivalent national documents:
  
  ```
  => S L1 NOT (CHEMICAL INDEXING EQUIVALENT/SO NOT WO/PC.B)
  L3       30 L1 NOT (CHEMICAL INDEXING EQUIVALENT/SO NOT WO/PC.B)
  ```

So there were 2 inventions in the answer set where the indexing was spread to two documents.

In INPAFAMDB there is no Basic but the field PN.B can be used for statistics purposes — this is the oldest of all patent publications in the family (however, PD.B, PK.B, etc. do not exist). For other fields, e.g. applicant, inventor, classification, the statistics cannot be limited to one member of the family (one publication may have more than one entry anyway). This means that for example several applicants or inventor names or even spellings (a particular feature of INPAFAMDB) and also several IPC codes of a document go into the statistical analysis. In this type of database it is thus more useful to use the documents count (#DOC) rather than the occurrences count (#OCC) for evaluation.

```plaintext
L8 ANALYZE L7 1-1000 PA : 1353 TERMS

TERM # # OCC # DOC % DOC PA
....... ........ .......... ........
1 32 25 2.50 LG ELECTRONICS INC.
2 32 19 1.90 SANYO ELECTRIC CO., LTD.
3 25 25 2.50 SANYO ELECTRIC CO LTD
4 23 23 2.30 BEIJING XINGZHE MULTIMEDIA TECHNOLOGY CO., LTD.
5 23 8 0.80 APPLIED MATERIALS, INC.
6 19 4 0.40 SOLYNDRA, INC.
7 17 16 1.60 SHARP KABUSHIKI KAISHA
8 17 11 1.10 JUSUNG ENGINEERING CO., LTD.
9 16 5 0.50 EMCORE CORPORATION
10 16 1 0.10 APPLE INC.
```

As SELECT always counts occurrences this is only of limited use.

In order to obtain a more correct result in particular the applicant and inventor names should be edited.

DPCI is a database specially adapted to citations and thus also citation statistics. Any statistics on bibliographical data and classifications should therefore be performed in DWPI.

51.10 Specific statistical problems

51.10.1 Statistics by time

Time series help to survey the development of a field of technology or a company in the past and to estimate its further development. For evaluation purposes often a number of time series are presented together to allow comparing e.g. a number of companies.

In most cases a chronological order based on years is sufficient. As a rule it is advisable to use Priority years (PRY, or first priority year PRYF). Based on the priority years a comparison of inventor activities can be made without taking
Types of search

into account the varying periods of examination procedures, for example. (Often analyses based on the Publication year only can be found. The timeliness shown this way is only an ostensible one – publications of the current year refer basically to inventor activities that took place at least one and a half years earlier.)

For the evaluation of patent citations it is advantageous to use the Publication date (PD, or Publication year PY), though. (First, patents or other literature can be cited only after publication, anyway. Second, most citations are introduced during examination, i.e. shortly before publication.)

If a more refined grouping in quarters and months is required, it is necessary to use the full date (Priority date PRD or First priority date PRDF, respectively; Publication date PD; Application date AD). The date is selected according to the YYYYMMDD pattern. The LEN option of the SELECT command may be used. Using e.g. \texttt{SEL LEN 6} restricts the date to the month. To do a quarterly evaluation a number of months have to be combined accordingly; there is no quarter-specific option available.

\begin{verbatim}
=> SEL 1. PRDF LEN 6
E1 THROUGH E11 ASSIGNED

=> D SEL
E1 2 199406/PRDF
E2 1 198409/PRDF
E3 1 198908/PRDF
E4 1 198911/PRDF
E5 1 199305/PRDF
E6 1 199310/PRDF
...
\end{verbatim}

As a rule, it is necessary to re-sort the list subsequently as the SELECT command creates a list in descending occurrence order. If a list was created by ANALYZE the answer will be sorted automatically after \texttt{D ALPHA} is entered.

Within the same record often several dates of the same type can be found together, e.g. due to combined priorities. In some databases (see table below) SELECTing can be done in the fields PRDF (date) or PRYF (year) and this way be restricted to the oldest priority. In the other databases it is not possible to eliminate this effect (except to download all records and examine them individually).

In a number of databases (PATDD, USPATFULL, USPAT2, IFIALL) the priority field exists only for those documents where a priority has actually been claimed.

In a number of databases (PCTFULL, PATDPAFULL, FRFULL) the priority fields are not standardised. In both cases the priority field should not be used for statistical purposes.

If in INPAFAMDB the PY field is used in a SELECT this is equivalent to PY.B. If all publication years are wanted in the analysis PY.M must be used.

\begin{table}
\centering
\begin{tabular}{|l|l|l|l|l|l|}
\hline
\textbf{Database} & \textbf{Priority} & \textbf{Application} & \textbf{Publication} & \textbf{Others} \\
\hline
AUPATFULL & PRD, PRDF, PRY, PRYF & AD, AY & PD, PY & RLD, RLY \\
CANPATFULL & PRD, PRDF, PRY, PRYF & AD, AY & PD, PY & RLD, RLY \\
CAPLUS** & PRD, B, PRY, PRY.B & AD, AY.B, AY.B & PD, B, PY, PY.B & RLD, RLY \\
CNFULL & PRD, PRDF, PRY, PRYF & AD, AY & PD, PY & RLD, RLY \\
DEFULL & PRD, PRDF, PRY, PRYF & AD, AY & PD, PY & RLD, RLY \\
DPCI**** & PRD, PRY, PRDF, PRYF & AD, AY & PD, B, PY, PY.B & ***** \\
DPW/F** / Invention level & PRD, PRY, PRDF, PRYF & AD, AY***, AY*** & PD, PY, PD, B, PY.B & \\
EFULL* & PRD, PRY, PRDF, PRYF & AD, AY & PD, PY & RLD, RLY \\
FRANCEPAT & PRD, PRY & AD, AY & PD, PY & RLD, RLY, ***** \\
FRFULL & PRD, PRY, PRYF & AD, AY & PD, PY & \\
GBFULL & PRD, PRY, PRYF & AD, AY & PD, PY & \\
IFIALL & PRD, PRY & AD, AY & PD, PY & FY, RLD, RLY, RPD \\
INFULL & PRD, PRDF, PRY, PRYF & AD, AY & PD, PY & RLD, RLY \\
INPADOCDB* & PRD, PRY, PRYF & AD, AY & PD, PY & \\
INPAFAMDB & PRD, PRY, PRYF & AD, AY & PD, PY & \\
JAPIO & PRD, PRY, PRDF, PRYF & AD, AY & PD, PY & \\
JPFULL & PRD, PRDF, PRY, PRYF & AD, AY & PD, PY & RLD, RLY \\
KOREAPAT & PRD, PRY & AD, AY & PD, PY & \\
PATDD* & PRD, PRY, PRDF, PRYF & AD, AY & PD, PY & \\
\hline
\end{tabular}
\caption{Database Priority Application Publication Others}
\end{table}
Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>Database</th>
<th>PRD, PRY</th>
<th>AD, AY</th>
<th>PD, PY</th>
<th>FD, FAD, RLD, RPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATDPA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PATDPAFULL*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCTFULL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USPATFULL, USPAT2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Databases with segmentation: There are additional fields with an appended .M relating to all publications included in the record. Fields without the appended .M relate to the most recent publication only.

** DWPI, CA, INPAFAMDB: These databases have fields relating to the Basic only (e.g. PY.B). These can be used to eliminate the influence of the family size.

*** Application data are complete from DW 9216 (see the DWPI handbook).

**** DPCI is rather less suited for statistics on bibliographical data. Anyway, this database has a number of fields for citation statistics (see the database description and citation searching).

***** FRANCEPAT: LS.GD, LS.LD, LS.NPD, LS.RD, LS.SD, SPC.AD, SPC.BPI, SPC.DA, SPC.DAD, SPC.GB, SPC.GD, SPC.LD, SPC.PD, SPCX.RD

51.10.2 Inventor and Assignee statistics

Evaluation by Inventor or Assignee names is simplified by them being selected as a phrase.

It may happen that different variations of the same name appear in the search result. Every variation will have its own entry in the list; it is up to the user to combine all variations of the name. (For ANALYZE results the EDIT command may be used. Combining the variations needs, however, prior examination of all entries. ANALYZE PLUS offers very good assistance with this.)

Often one record holds multiple names of inventors or assignees. It is not possible to limit the SELECT to e.g. the first name only (with the exception of databases with segmentation, PATDPA, see below). Every entry is SELECTed from the name field separately and counted in the list. Therefore simply adding up the numbers from the list will yield a result different from 100%, in most cases higher than that. This is not an error that would require ‘correction’. Preferably presentation of the results should be done in a way that takes this effect into account.

In an Assignee statistics it should be considered that the names of companies may have changed, e.g. after mergers and acquisitions. This must be taken into account when editing the statistics tables.

In databases with segmentation (INPADOCDB, PATDPAFULL, EFULL, etc.) it is possible to limit the statistical evaluation to the latest publication level if the IN or PA fields are used in place of the IN.M or PA.M fields.

In DWPI the Patent assignee code (PACO) can be used. This is, however, only advisable for cases where the code is unambiguous, i.e. the largest assignee companies. There is also a field PAX containing both the patent assignee name and the patent assignee code. This field is very useful to edit patent assignee names:

```
=> ANALYZE L2 1-1000 PAX
L3          ANALYZE L2 1-1000 PAX :  931 TERMS
=> D PAX
L3          ANALYZE L2 1-1000 PAX :  931 TERMS
```

<table>
<thead>
<tr>
<th>TERM #</th>
<th># OCC</th>
<th># DOC</th>
<th>% DOC</th>
<th>PAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>65</td>
<td>65</td>
<td>6.50</td>
<td>(SMSU) SAMSUNG ELECTRONICS CO LTD</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
<td>50</td>
<td>5.00</td>
<td>(GLDS) LG ELECTRONICS INC</td>
</tr>
<tr>
<td>3</td>
<td>34</td>
<td>34</td>
<td>3.40</td>
<td>(MICT) MICROSOFT CORP</td>
</tr>
<tr>
<td>4</td>
<td>25</td>
<td>25</td>
<td>2.50</td>
<td>(OYNO) NOKIA CORP</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
<td>24</td>
<td>2.40</td>
<td>(MATU) MATSUSHITA DENKI SANGYO KK</td>
</tr>
<tr>
<td>6</td>
<td>24</td>
<td>24</td>
<td>2.40</td>
<td>(PHIG) KONI NK PHILIPS ELECTRONICS NV</td>
</tr>
<tr>
<td>7</td>
<td>17</td>
<td>17</td>
<td>1.70</td>
<td>(SKTE-N) SK TELECOM CO LTD</td>
</tr>
<tr>
<td>8</td>
<td>16</td>
<td>16</td>
<td>1.60</td>
<td>(MATU) MATSUSHITA ELECTRIC IND CO LTD</td>
</tr>
<tr>
<td>9</td>
<td>14</td>
<td>14</td>
<td>1.40</td>
<td>(SEI) SIEMENS AG</td>
</tr>
<tr>
<td>10</td>
<td>13</td>
<td>13</td>
<td>1.30</td>
<td>(IBMC) INT BUSINESS MACHINES CORP</td>
</tr>
<tr>
<td>11</td>
<td>13</td>
<td>13</td>
<td>1.30</td>
<td>(TOKE) TOSHIBA KK</td>
</tr>
</tbody>
</table>

In some of the databases there are a number of fields for the patent assignee: DWPI (PA, PACO, PAX), INPADOCDB/INPAFAMDB (PA, PAS), PATDPA (PA, PAC) and IFIALL (PA, PAF). This offers an opportunity to analyse the patenting habit of companies (e.g. co-operation of applicants).
### Types of search

<table>
<thead>
<tr>
<th>Database</th>
<th>Inventor</th>
<th>Patent assignee</th>
<th>Other fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUPATFULL</td>
<td>IN</td>
<td>PA, CS</td>
<td>IN.CNY</td>
</tr>
<tr>
<td>CANPATFULL</td>
<td>IN</td>
<td>PA, CS</td>
<td>AG, AG,CNY, IN.CNY, PA, PA.CNY, PA.NAT, PA.RES, PA.T, PAA</td>
</tr>
<tr>
<td>CAPLUS</td>
<td>AU, IN</td>
<td>CS, PA</td>
<td>PB, PUI</td>
</tr>
<tr>
<td>CNFULL</td>
<td>IN</td>
<td>PA, CS</td>
<td>IN.CNY, PA.CNY</td>
</tr>
<tr>
<td>DEFULL</td>
<td>IN, AU</td>
<td>PA, CS</td>
<td>IN.CNY, PA.CNY</td>
</tr>
<tr>
<td>DPCI***</td>
<td>IN</td>
<td>PA</td>
<td>PACO</td>
</tr>
<tr>
<td>DWPI / Invention level</td>
<td>IN</td>
<td>PA</td>
<td>PACO, PAX</td>
</tr>
<tr>
<td>EPFULL*</td>
<td>AU, IN</td>
<td>PA</td>
<td>AG, AG,CNY, AG.CTY, IN.CNY, AG.COM, IN.CTY, IN.STR, PA.CNY, PA.CTY, PA.DS, PA.STR, PAA, PAN</td>
</tr>
<tr>
<td>FRANCEPAT</td>
<td>IN</td>
<td>PA, PA.AP, PA.AS</td>
<td>AG, INA, LI, LIA, LINM, LIT, PAA, PAN, SPC.PA</td>
</tr>
<tr>
<td>FRFULL</td>
<td>IN</td>
<td>PA</td>
<td>PA.CNY</td>
</tr>
<tr>
<td>GBFULL</td>
<td>IN</td>
<td>PA, CS</td>
<td>PA.CNY</td>
</tr>
<tr>
<td>IFIALL</td>
<td>IN (INF)</td>
<td>PA, PA.F, PACO</td>
<td>AG (LREP), EXNAM</td>
</tr>
<tr>
<td>INFULL</td>
<td>IN</td>
<td>PA, CS</td>
<td>IN.CNY, PA.CNY</td>
</tr>
<tr>
<td>INPADOCDB*</td>
<td>AU, IN, INS, CS, CS.M, PA, PAS</td>
<td>INA**, PAA**</td>
<td>LS.IN, LS.PA, LS.OP, LS.AG</td>
</tr>
<tr>
<td>INPAFAMDB</td>
<td>AU, IN, INS, CS, CS.M, PA, PAS</td>
<td>INA**, PAA**</td>
<td>LS.IN, LS.PA, LS.OP, LS.AG</td>
</tr>
<tr>
<td>JAPIO</td>
<td>IN</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>JPFULL</td>
<td>IN</td>
<td>PA, CS</td>
<td>IN.CNY, PA.CNY</td>
</tr>
<tr>
<td>KOREAPAT</td>
<td>IN, AU</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>PATDD*</td>
<td>IN</td>
<td>PA</td>
<td>INA, PAA</td>
</tr>
<tr>
<td>PATDPA</td>
<td>IN, INC, INO</td>
<td>PA, PAC, PAO</td>
<td>INA**, PAA**, PAN, AG</td>
</tr>
<tr>
<td>PATDPAFULL*</td>
<td>IN</td>
<td>PA</td>
<td>INA**, PAA**</td>
</tr>
<tr>
<td>PCTFULL</td>
<td>IN</td>
<td>PA</td>
<td></td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td></td>
<td>PA</td>
<td>CS</td>
</tr>
<tr>
<td>USPATFULL, USPAT2</td>
<td>IN</td>
<td>PA</td>
<td>IN.CTY, PA.CTY, IN.CNY, PA.CNY, IN.ST, PA.ST, IN.ZIP, PA.ZIP, AG (LREP), EXNAM</td>
</tr>
</tbody>
</table>

* Databases with segmentation: There are additional fields with an appended .M relating to all publications in the record. Fields without this appended .M relate to the most recent publication only.
** Selects address details, limited use for statistics purposes.
*** DPCI is rather less suited for statistics on bibliographical data. Anyway, this database has a number of fields for citation statistics (see the database description and citation searching).

51.10.3 Country statistics

Country statistics are helpful to find:
- Countries of origin of inventions (Priority countries: SEL PRC),
- Destination countries of applications (Application countries: SEL AC; Publication countries: SEL PC; Designation countries: SEL DS)

The country information is selected as two-letter codes, thus making evaluation quite easy.

```
=> SEL L1 1. PRC
E1 THROUGH E7 ASSIGNED

=> D SEL
E1 28  US/PRC
E2 20  JP/PRC
E3  7  GB/PRC
E4  4  DE/PRC
E5  2  NL/PRC
E6  1  AU/PRC
```
When analysing destination countries the Designated states of European (EP) and PCT (WO) applications must be considered. In the application often a number of countries is designated which are not maintained later when this would incur costs. Therefore it should be considered if the DS field is taken into account for the statistics (depending on the database used, probably for granted patents only).

In some databases the priority field is only available if a priority has actually been claimed. In these databases it may be necessary to include both priority countries (PRC) and application countries (AC) to evaluate on countries of origin.

<table>
<thead>
<tr>
<th>Database</th>
<th>Priority</th>
<th>Application</th>
<th>Publication</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUPATFULL</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td>IN.CNY</td>
</tr>
<tr>
<td>CANPATFULL</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td>IN.CNY, PA.CNY, PA.NAT, PA.T, PAA</td>
</tr>
<tr>
<td>CAPlus**</td>
<td>PRC, PRC.B</td>
<td>AC, AC.B</td>
<td>PC, PC.B, DS, DS.B, PCS, PCS.B</td>
<td></td>
</tr>
<tr>
<td>CNFULL</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td>IN.CNY, PA.CNY</td>
</tr>
<tr>
<td>DEFULL</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td>IN.CNY, PA.CNY</td>
</tr>
<tr>
<td>DPCI****</td>
<td>PRC</td>
<td>AC</td>
<td>PC, PC.B, PCS, DS</td>
<td></td>
</tr>
<tr>
<td>DWPi** /</td>
<td>PRC</td>
<td>AC***</td>
<td>PC, PC.B, DS, PCS, CYC</td>
<td></td>
</tr>
<tr>
<td>Invention level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPFULL*</td>
<td>PRC</td>
<td>AC</td>
<td>PC, DS, PRCO</td>
<td></td>
</tr>
<tr>
<td>FRANCEPAT</td>
<td>PRC</td>
<td>AC</td>
<td>PC, PCS</td>
<td>INA, LIA, RLC, RPC,</td>
</tr>
<tr>
<td>FRFULL</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td>PA.CNY</td>
</tr>
<tr>
<td>GBFULL</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td>PA.CNY</td>
</tr>
<tr>
<td>IFIALL</td>
<td>PRC</td>
<td>AC</td>
<td>PC, PCS</td>
<td>FC, RLC, RPC</td>
</tr>
<tr>
<td>INFULL</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td>IN.CNY, PA.CNY</td>
</tr>
<tr>
<td>INPADOCDB*</td>
<td>PRC, PRC.WO</td>
<td>AC, AC.WO</td>
<td>PC, DS, PCS</td>
<td>INA, PAA, IN.CNY, PA.CNY</td>
</tr>
<tr>
<td>INPAFAMDB</td>
<td>PRC, PRC.WO</td>
<td>AC, AC.WO</td>
<td>PC, DS, PCS</td>
<td>INA, PAA, IN.CNY, PA.CNY</td>
</tr>
<tr>
<td>JAPIO</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td></td>
</tr>
<tr>
<td>JPFULL</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td>IN.CNY, PA.CNY</td>
</tr>
<tr>
<td>KOREAPAT</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td>RPC, RLC</td>
</tr>
<tr>
<td>PATDD*</td>
<td>PRC</td>
<td>AC</td>
<td>PC, PCS</td>
<td>INA, PAA</td>
</tr>
<tr>
<td>PATDPA</td>
<td>PRC</td>
<td>AC</td>
<td>PC, DS, PCS</td>
<td>FC, FAC, RLC, RPC</td>
</tr>
<tr>
<td>PATDPAFULL*</td>
<td>PRC</td>
<td>AC</td>
<td>PC</td>
<td></td>
</tr>
<tr>
<td>PCTFULL</td>
<td>PRC</td>
<td>AC</td>
<td>PC, DS, PCS</td>
<td></td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USPATFULL</td>
<td>PRC</td>
<td>AC</td>
<td>PC, PCS</td>
<td>RLC, RPC, IN.CNY, PA.CNY</td>
</tr>
</tbody>
</table>

* Databases with segmentation: There are additional fields with an appended .M relating to all publications in the record. Fields without this appended .M relate to the most recent publication only.

** DWPI, CA, INPAFAMDB: These databases have fields relating to the Basic only (e.g. PY.B). These can be used to eliminate the influence of the family size.

*** Application data are complete from DW 9216 (see the DWPI handbook).

**** DPCI is rather less suited for statistics on bibliographical data. Anyway, this database has a number of fields for citation statistics (see the database description and citation searching).

51.10.4 Subject statistics (Classifications)

To create a statistics by subject field, use of the International Patent Classification is appropriate in most cases.

51.10.4.1 IPC1–7

Often the evaluation of the main classification (ICM) is sufficient, although in many cases it is advisable to additionally use the secondary classification (ICS), or both (IC).

In some databases (mainly CA, IFIClaims) in particular older documents often do not have separate ICM and ICS fields. Instead there is only a combined IC field, which should be used for statistics.
Types of search

In DWPI re-classification of the back-file/reload may affect the ICM or ICS fields. These fields should therefore not be used any more, even for publications before 2006.

Depending on the required aggregation level (restriction of the evaluation to higher hierarchical IPC levels) either file-specific SELECT fields or the LEN option may be used.

<table>
<thead>
<tr>
<th>Level</th>
<th>Example (STN format)</th>
<th>Field</th>
<th>LEN Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>G01RG23-16</td>
<td>IC, ICM, ICS</td>
<td>SEL</td>
</tr>
<tr>
<td>Main group</td>
<td>G01RG23</td>
<td>SCG, SCGM, SCGS</td>
<td>SEL LEN 7</td>
</tr>
<tr>
<td>Sub-class</td>
<td>G01R</td>
<td>SCL, SCLM, SCLS</td>
<td>SEL LEN 4</td>
</tr>
<tr>
<td>Class</td>
<td>G01</td>
<td>-</td>
<td>SEL LEN 3</td>
</tr>
<tr>
<td>Section</td>
<td>G</td>
<td>-</td>
<td>SEL LEN 1</td>
</tr>
</tbody>
</table>

The SCG, etc., and SCL, etc., fields do not exist in some of the databases. The LEN option can be used in all of the databases.

Databases with segmentation: There are additional fields with an appended .M relating to all publications in the record. Fields without this appended .M relate to the most recent publication only.

In the DPCI, DGENE, PCTGEN and IMSPATENTS databases classification details are not available.

51.10.4.2 IPC8

The SELECT fields available for IPC8 are:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPC.F</td>
<td>Field for statistical analysis, contains the main classification ICM (versions 1–7) and the first IPC codes (IPC1, version 8) – <strong>Advantage:</strong> only one code is selected per document – <strong>Problem:</strong> In the guidelines of the WIPO it is only recommended to put the IPC code for the main aspect into the first position, contrary to IPC versions 1–7. The patent offices are not obliged to adhere to this. DE, CA and US do, the EPO does not as such; distinction does not exist in the EPC/CPC (codes are arranged in alphabetical order). <strong>Note:</strong> In DWPI and in INPADOCDB/INPAFAMDB one IPC.F code is entered per document; in CAplus there may be more than one IPC.F code per document.</td>
</tr>
<tr>
<td>IPC.A</td>
<td>Selects all Advanced Level IPC codes</td>
</tr>
<tr>
<td>IPC.C</td>
<td>Selects all Core Level IPC codes</td>
</tr>
<tr>
<td>IPC.AI</td>
<td>Selects all Advanced Level IPC codes for invention information – <strong>Problem:</strong> There may be more than one Advanced Level code per document</td>
</tr>
<tr>
<td>IPC.CI</td>
<td>Selects all Core Level IPC codes for invention information (provides good overview) – <strong>Problem:</strong> There may be more than one Core Level code per document</td>
</tr>
<tr>
<td>IPC.I</td>
<td>Selects all initial IPC codes</td>
</tr>
<tr>
<td>IPCR</td>
<td>Selects all re-classified IPC codes</td>
</tr>
</tbody>
</table>

Before performing a statistical analysis always SET ICFORMAT ON to allow for the extra digits of IPC8 codes.

The limitations/extension of .M and .B do not exist. The most recent level is always selected in databases with segmentation. In DWPI and CA the data from all family members are selected.

In DWPI the codes are deduplicated, i.e. each code in the document goes only once into the statistics. In CA and INPAFAMDB all family members are entered, even if multiple. Therefore the documents count (#DOC) rather than occurrences count (#OCC) should be used.

There are no special fields for the subclass or group. The LEN option has to be used if a limitation is desired.

In addition there is a field IPC relating to the IPC1–8. This selects all IPC codes in the document. In databases with segmentation these codes only relate to the most recent level. This field is often used for statistics purposes despite the classifications not being ranked, as in IPC.F, and there being usually more than one classification in a document. The field IPC.M is also available to analyse all levels.

51.10.4.3 Other classifications

The USCL (US patent classification) is included in these databases: CAPPLUS, IFICLAIMS, DWPI, USPATFULL and INPADOCDB/INPAFAMDB.

The EPC and CPC are entered in these databases: INPADOCDB/INPAFAMDB, DWPI, CAplus, RDISCLOSURE. The EPC is gradually replaced by the CPC.

Japanese FTERMS are available in CAPPLUS from 2004, in DWPI from 1966 and INPADOCDB/INPAFAMDB.

Japanese Fl-terms are available in DWPI and INPADOCDB/INPAFAMDB from 1966.
Database-specific manual codes are available in DWPI.

Special statistics fields are available for all classifications. Using the LEN option (SEL LEN 6 or 3) it is possible to analyse the classifications at a higher hierarchy level.

51.10.5 Citation statistics

The DPCI database is recommended for citation statistics (see the database description and “Citation Searching”).

51.11 Common analyses in patent statistics

51.11.1 Market analysis

For the statistical analysis of the applications or patents of a certain field a representative sample is an indispensable preliminary. The sample should be restricted to the field to be analysed as narrow as possible. The sample does not have to hold all relevant documents but only those, which are representative for the field in question. Documents not closely belonging to the analysed field increase the risk of obtaining distorted results.

An analysis of a market or technology field will usually be preceded by a search by IPC and/or text. The searcher may decide to analyse the results of a previous search or to specially create a search strategy for the statistical analysis only.

Here are a few basic analyses as an example for a given technology field:

- **Time series of national applications**: Based on priority years this list allows to estimate inventor activity and its development over the years. The time series may be complemented by the same time series for the most important (i.e. most active) applicants.

- **Ranking of applicants**: This list shows the most important companies on the market and their ranking in terms of patent activity. It may be informative to compile this list for a limited period (e.g. five years) or consecutive periods of the same length each. This will make it possible to estimate the development and to find newcomers or dropouts.

- **Target countries**: This list yields information on the countries seen as potential markets by the applicants.

- **Priority countries of applications**: This list yields information similar to that of the list of applicants (see above), but this time at country level.

Often the analysis of a technology field is complemented with a similar analysis of the most important companies active in the field.

Depending on the problem and technology field this analysis may be limited to certain markets (DE, US, East-Asia, etc.) or so-called Triade patents (combined applications in EP, US, JP).

51.11.2 Competitor analysis

This analysis usually follows a name search. In order to better estimate the performance of a company in question often the results are compared to those obtained for the most important companies active in the same market (i.e. technology field or country).

- **Time series of applications**: The time series (if applicable by field of technology) allows estimating the R&D activity of the company.

- **Fields of technology**: Based on a list of IPC codes of the applications or patents the main fields of research activity can be found.

- **Application countries**: The list of application countries allows to conclude on possible prospective market activity.

- **Grant ratio**: The portion of patents granted after examination to the number of all applications allows to estimate how active the company in question maintains its intellectual property rights.

  This may be complemented by the portion of patents lapsed after a certain period of time. For a number of countries this information is available from the legal status data.

Depending on the desired details these can be complemented by further analyses, e.g. a list of the most active inventors from the company, co-operation with other companies (from common applications), competitors (e.g.
Types of search

from the names of opponents – available from PATDPA, EPFULL or INPADOCDB/ INPAFAMDB – or examiner references).

51.12 Post-processing

51.12.1 General

Processing the results of a statistical analysis will normally include at least extracting of the data from the transcript file in order to include them into the search report.

For the sake of easier evaluation the numbers from the transcript should be presented in graphical form. Spreadsheet or presentation software can be used for this purpose. Most programs offer a way to import data from ASCII files. The program has to be told the file format, i.e. for the DELIMITED format:

- Data element separator: semicolon (;),
- Record separator: new line (CR-LF).

Often data in columns can be used; this allows making use of a TABULATE GRID display.

The ANALYZE PLUS/STN EXPRESS software can be useful to quickly create good quality tables and diagrams. This way is recommendable if a quick, yet attractive result is desired without bothering too much with the spreadsheet or presentation program.

Below the most appropriate types of graphical representation are being discussed in brief without going into detail with the realization in the various software packages.

51.12.2 Time series

Time series are best presented in a line or bar chart.

![Figure: Time series of a technology field](image)

For the most recent year a drop of the figures can be seen which is probably not due to reduced inventor activity but to the fact that publication is behind application (e.g. 18 months in DE). At the time when this example was created the data up to 2000 can be considered reliable.

If several time series have to be presented a bar chart quickly becomes difficult to evaluate. In this case a line chart may be more appropriate.
This example shows the same analysis for the same field of technology but with the data for two applicants added.

### 51.12.3 Ranking

To present rankings (i.e. for inventor or applicant statistics, country statistics or technology statistics) bar charts can be used.

Pie charts are useful for patent statistics in a few exceptional cases only. In most cases SELECT/ANALYZE extracts more than one term from some of the documents. Then the numbers do not ‘sum up’ to the number of documents or the result is different from 100 per cent.
51.13 **STN®AnaVist™**

STN AnaVist is an analysis and visualization tool, which can be used to create statistic tables and diagrams

- to include them in a comprehensive search report (as a file or short report)
- to interactively provide, both for the searcher and for the end user/client, information to evaluate the search result and explore different facets.

It is a prerequisite for this tool that the data in the databases are prepared in a standardised way in order to allow application of uniform criteria for the identification of concepts and meaningful analysis/visualization. So far these databases are included in STN AnaVist: CAPLUS, USPATFULL, PCTFULL, EPFULL, and DWPI.

STN AnaVist automatically performs statistical analyses in the database(s) selected (patent assignee, patent classification, etc.). The fields analysed do not need to, and cannot, be selected by the searcher. This can be seen as an advantage as this does not require the same degree of in-depth knowledge of the databases to obtain good results, as this is the case with the other statistics tools.

**51.13.1 Search and data transfer**

The search is performed with the STN Express software.

The search strategy may be quite extensive (20,000 documents being the limit) as with STN AnaVist it is possible to limit this to a smaller sample at a later stage.

Transfer of the search result from STN Express or STN on the Web to AnaVist is prepared. (What is transferred are not the full documents but rather access codes for the documents.) STN AnaVist automatically produces a list of titles for a first sifting.

**51.13.2 Data analysis and visualization**

By activation of the button Start Visualization the analysis and visualization are started.

A number of fields can be selected from the individual databases for the creation of data clusters (Clustering Concepts) to be used for a topological map of the text analysis (Research Landscape):

- Title/Abstract
- Exemplary/First Claim
- All Claims (PCTFULL, EPFULL, USPATFULL only)
- IPC Codes
- Technology Indicators (CAPLUS, USPATFULL only)

The default fields are Title/Abstract. Other combinations of fields can be selected from Custom Fields. If any of the fields have not data in some of the documents Backup fields are used.
51.13.2.1 Creation of bar charts, matrices, lists and topological maps

Once the first visualization of the search result is completed three frames are automatically displayed:

- Topological map of the text analysis
- Bar chart of companies (patent assignees)
- Matrix of authors/inventors and years

In addition a document frame is provided to display selected titles.

This example was created with the topic Application of radar in motor vehicles in the DWPI database.

Depending on the database representations of other aspects can be displayed:

- Bar chart of the patent countries (application countries)
- Bar chart of patent classifications
- Bar chart of publication years
- Bar chart of priority years/date
- Survey of data clusters (Clustering Concepts)
- Technology Indicators (CAplus and USPATFULL only)
- Document distribution (patent/non-patent literature)
- Derwent Classification (DWPI only)
- Derwent Manual Codes (DWPI only)
- Labels (assigned by user)
- Other matrix representation of two criteria, e.g. Patent assignee and Priority years

An important feature is the interactive linking within the individual analyses and between them. If a selection of a range is made in one frame (bar, column, row, circled area in the topological map) all ranges corresponding to the
Types of search

First are highlighted both in the same frame and in all other frames. This way it is easy to identify e.g. connections in the assignment of IPC codes, co-operation between companies or between companies and inventors.

1. [Diagram 1]

2. [Diagram 2]
It is also possible to identify e.g. the main areas of activity within a technology field or of companies by IPC, Derwent Classification, Manual Codes, and technical terms in the topological map.

For the example technology Application of radar in motor vehicles the topological map shows to main areas of activity:

- Elements/operation of the radar (1.)
- Applications (2.)

In the topological map, the areas of interest can be enlarged and displayed with more detail.

It is possible to improve the clustering of similar documents by keywords if the keywords are edited (text mining).

3D bar charts, which tend to lack clarity, are not available. The results of a linked analysis of two criteria can be represented by means of the interactive display described above or as a matrix. The matrix below shows the patent assignees and priority years.

![Matrix showing patent assignees and priority years](image)

Even with databases having standardized data it is sometimes necessary to edit the results of the analysis (e.g. inventor, patent assignee). STN AnaVist automatically groups names which are known to the system (CAS Company Thesaurus). Customized groups can be saved for later use in other searches and analyses.
51.13.2.2 Finding main areas of research activity

It should be examined whether it is sufficient to analyse the total result set or if it is possible to find, and analyse, individual subjects/areas of activity in the field. For this, the titles and sometimes further text of the documents should be read. The documents to be read can be identified e.g. by selecting certain ranges (bars, columns, rows, circled area in the topological map). With each selection a list of documents (Highlighted Documents) is produced that can be evaluated.

The topological map can be effectively used here. The area selected in the map was obstruction, apparatus and the document titles resulting were checked. Here, the titles can be marked (highlighted) in four stages to filter them, display, print, etc.

51.13.2.3 Creating subsets and visualization of subsets

In order to limit a sample to a smaller subset a range of documents should be selected in one of the frames (bar, column, row, circled area in the topological map). This produces a list of documents (Highlighted Documents) that can again be analyzed and visualized. This list can be further limited by valuating (assigning Labels) and selection of titles (application of filters) – Drill down from this Bar (the latter may of course also be applied to the whole sample).
In our example the area Applications was circled on the map and maybe some documents selected, then a visualization of this subset was initiated. Now the fields of application can be identified more clearly.

- Collision warning and prevention, driver assistance (collision, predict, obstacle, warn, drive, assistance)
- Recognition of the road surface (road, surface)
- Monitoring the environment of the vehicle (image, camera, display)
- Distance control, vehicles in front (precede, calculate, track, move, obstructs)

Now it must be decided whether more bar charts, tables, evaluated title lists, etc., on these areas of application need to be created, or whether a visualization for each area and further evaluation is to take place. In the title list below Labels were assigned to the documents.
51.13.3 Creating the search report

51.13.3.1 Saving the results and producing a report

The individual analyses can be saved in a number of formats for post-processing in order to include them in a printed or electronic search report. Also a short report (1 page) or a detailed report (8-9 pages) can be produced automatically.

51.13.3.2 Transferring the visualization results to end users/clients

Using a so-called Shared Project Login ID the results can be transferred to other users in the company. This allows them to interactively view or further evaluate the results, either alone or together with the searcher. If documents are displayed additional costs may be caused.

51.13.4 Summary

STN AnaVist™ offers these features:

<table>
<thead>
<tr>
<th>Use:</th>
<th>Menu-guided creation of statistical tables, visualization; results can be made available interactively for searcher or end user/client.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options:</td>
<td>Automatic creation of a number of tables and diagrams, which are known from experience to be useful in patent statistics. Many options for display/marking of links between search results.</td>
</tr>
<tr>
<td>Maximum number of terms to be extracted / documents:</td>
<td>20,000 documents</td>
</tr>
<tr>
<td>Editing of tables:</td>
<td>Editing lists, e.g. patent assignees, is made effective. Effort needed is made lower from the start by the prepared databases.</td>
</tr>
<tr>
<td>Using two or more criteria:</td>
<td>One or two criteria can be evaluated and represented in a table or diagram. The display of two criteria always takes place in tables.</td>
</tr>
<tr>
<td>Visualization of results:</td>
<td>Visualizations are quick and easy to create. Additional visualizations of partial analyses are also possible. Extensive possibilities to display links between the analyses exist.</td>
</tr>
<tr>
<td>Functions to improve the relevance of the search result / sample:</td>
<td>Various possibilities exist to create subsets, i.e. limited samples (selection from the map or the diagrams, labelled documents), and start an analysis and visualization of the subsets.</td>
</tr>
</tbody>
</table>

Conclusion: STN AnaVist is not only a tool to efficiently create single statistical tables and diagrams in high quality. With its interactivity and the possibility to visualize subsets it offers comfortable means to create meaningful search reports (print or electronic with screenshots). Using a Shared Project Login ID the results can even be made available to the end user/client.

51.13.5 Publications


2. Robert Austin: Exploring World Patents Index in STN®AnaVist™, Version 2.0


52 Monitoring patents

52.1 Introduction
By monitoring patents in patent databases it is possible to continuously gain information on intellectual property rights or progress of technology. In this section the information available in the patent databases with respect to monitoring patents is presented and various ways to perform current-awareness searches in these databases are shown.

Current-awareness searches are made to continuously monitor a subject field, company, or inventor for new patents or published patent applications. One benefit is that new intellectual property rights can be recognised in good time to take action against infringements, for example by filing an opposition within the opposition period. Another benefit is that the market can be monitored for example for the development of research priorities or emerging competition.

Various names are used for patent monitoring:
- Selective Dissemination of Information (SDI)
- Current Awareness Service (or Control or Information),
- Current Alert Services,
- Profile,
- Watch Services.

52.2 Types of search
- Monitoring a subject field (search by subject):
  - Search by classification
  - Search by text
  - Search by index terms
  - Checking new patents and utility models in the subject field for possible infringement
  - Monitoring technological trends
  - Monitoring companies active in the field (competitors or cooperation partners)
  - Monitoring intended markets
- Monitoring of competitors by name search:
  - Checking new patents and utility models of competitors for possible infringement
  - Monitoring the target markets of competitors
  - Monitoring competition research priorities
- Monitoring patent families:
  - Monitoring patent families for new members (Equivalents)
  - Monitoring patent procedures for grant, lapse, entry into the national phase, etc.
  - Monitoring designation countries
- Monitoring citations:
  - Where do our own patents get cited?
  - Checking for possible infringement
52.3 The SDI command

Using the SDI command a ‘subscription’ for a periodical search in one or more databases can be set up. When SDI is entered you are prompted for all required parameters. The intended database must be open and there must be a search result or search query, i.e. an L number. This search query must not include any of the commands SELECT, ANALYZE, TRANSFER, FSORT, FSEARCH, or TRANSFER.

```plaintext
=> FILE INPADOCDB

=> SDI
ENTER QUERY L# FOR SDI REQUEST OR (END): L1
ENTER UPDATE FIELD CODE (UP), UPAA, UPFA, UPM, UPFL, UPCC, EDLS, UPBB, UPFE, EDPR, ED, EDP, EDF, UPF, UPP, UPFC, UPLB, UPLS OR ?:.
ENTER SDI REQUEST NAME, (AA040/S), OR END: INLINE/S
ENTER COST CENTER (NONE) OR NONE:.
ENTER TITLE (NONE): INLINE SKATES
ENTER METHOD OF DELIVERY (EMAIL), ONLINE OR RSS: RSS
ENTER EMAIL ID {1156K}: ELKE.THOMAE@TU-ILMENAU.DE
ENTER COST CENTER (NONE) OR NONE:.
ENTER TITLE (NONE): INLINE SKATES
ENTER METHOD OF DELIVERY (EMAIL), ONLINE OR RSS: RSS
ENTER RSS URL=https://stnweb.fiz-karlsruhe.de/cgi-bin/nph-stnrss?T9n98R9VVco1nfKt2AYF
Query L1 has been saved as SDI request 'INLINE/S'.
```

Note: To be able to set up a SDI you need a STNMAIL ID. You can get help with the following commands:

```plaintext
=> HELP SET MAILID
=> HELP MAIL
=> HELP READ
=> HELP SEND
```

52.3.1 Options to customize a SDI run

- Automatic numbering
- Delivery of search results: on-line, STN mail, Internet e-mail, RSS
  - Email, ending "internet": documents (preferably without patent images) will be sent in the email message. Note: Your mailbox should offer sufficient space.
  - Email, not ending "internet": links to the documents (RTF, PDF, HTML) will be delivered to your mailbox recommended for patent monitoring.
  - RSS: a URL is displayed. This can be used with an RSS reader software. The documents can be delivered by RSS and e-mail at the same time.
  - If you wish to use a free or reduced format in an SDI search in order to first select interesting documents choose ONLINE as Method of Delivery. The answer set will be saved in the system. To display the documents use the free or reduced format first to select the wanted documents and display the selected documents in the desired format in the second step.
- Hit-term highlighting in the search results
- Elimination of already known answers from an earlier SDI run (Historical Duplicate Removal)

In patent databases the documents can be updated when new information arrives. When monitoring a subject field it is often better to eliminate already known answers, otherwise the documents will be delivered again with
every change (legal status, patent family, etc.). When monitoring a particular legal status or patent family this update is what is wanted and must not be eliminated.

Note: The old results will be kept for one year only, i.e. if an update occurs later than one year after the document was found for the first time it will be delivered again.

- Sorting the answers
- In case of ‘zero’ result (optional): notify on the ‘zero’ information
- Set the frequency of SDI runs
- Set a date for the SDI to expire
- Variable SDI frequency in some databases (CAPLUS: daily, weekly, biweekly)

52.3.2 Displaying a list of SDI profiles

<table>
<thead>
<tr>
<th>NAME</th>
<th>CREATED</th>
<th>NOTES/TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INLINE/S</td>
<td>31 AUG 2012</td>
<td>SDI REQUEST FOR FILE INPADOCDB</td>
</tr>
<tr>
<td>INLINE SKATES</td>
<td></td>
<td>I N L I N E SKATES</td>
</tr>
</tbody>
</table>

52.3.3 Displaying a SDI profile

<table>
<thead>
<tr>
<th>NAME</th>
<th>CREATED</th>
<th>NOTES/TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INLINE/S</td>
<td>31 AUG 2012</td>
<td>SDI REQUEST FOR FILE INPADOCDB</td>
</tr>
<tr>
<td>INLINE SKATES</td>
<td></td>
<td>I N L I N E SKATES</td>
</tr>
<tr>
<td>COST CENTER</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>UPDATE QUALIFIER</td>
<td>UP</td>
<td></td>
</tr>
<tr>
<td>METHOD OF DELIVERY</td>
<td>RSS</td>
<td></td>
</tr>
<tr>
<td>RSS URL</td>
<td><a href="https://stnweb.fiz.karlsruhe.de/cgi-bin/nph-stnrss?T9n98R9VVo1nfKt2AYFxBNPx_5fEAm">https://stnweb.fiz.karlsruhe.de/cgi-bin/nph-stnrss?T9n98R9VVo1nfKt2AYFxBNPx_5fEAm</a></td>
<td></td>
</tr>
<tr>
<td>EMAIL ID(S)</td>
<td><a href="mailto:ELKE.THOMAE@TU-ILMENAU.DE">ELKE.THOMAE@TU-ILMENAU.DE</a>,INTERNET</td>
<td></td>
</tr>
<tr>
<td>NOTIFICATION</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>PRINT FORMAT</td>
<td>ALL.M</td>
<td></td>
</tr>
<tr>
<td>MAXIMUM NUMBER OF HITS TO BE DELIVERED</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>HIGHLIGHTING</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>DUPLICATE ELIMINATION</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>SEND SDI WITH NO ANSWERS</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>SDI RUN FREQUENCY</td>
<td>WEEKLY</td>
<td></td>
</tr>
<tr>
<td>DISPLAY QUERY WITH RESULTS</td>
<td>YES</td>
<td></td>
</tr>
</tbody>
</table>

52.3.4 Viewing SDI results

SDI results to be delivered ONLINE can be viewed with the ACTIVATE command. The first SDI result of the above profile would have the name INLINE01/A, the counter being incremented with every SDI run:

```plaintext
=> ACT INLINE01/A
```

Else the results are delivered automatically either by post, fax, or to the e-mail address and do not need to be viewed on-line.

52.3.5 SDI EDIT

A SDI profile can be edited with the SDI EDIT command. It is often easier to delete the old profile and issue a new one.

52.3.6 Deleting an SDI profile

```plaintext
=> DELETE INLINE/S
DELETE INLINE/S? (Y)/N: Y
INLINE/S DELETED
```
52.3.7 Monitoring multiple databases (Multi-file SDI)

To set up a SDI profile for multiple databases all the databases to be used have to be open first. Then SDI MFILE is entered and you are prompted first for the name and all properties of the SDI profile and then for the names and parameters of the search in each of the databases.

When a multi-file SDI is set up there are of course the same problems as with any multi-file search in patent databases: It is not possible to formulate all types of queries in such a way that they can be used in parallel in each of the databases. In addition, there are varying update fields in each of the databases.

If the PACKAGE option is used the results of this multi-file SDI are delivered only once per month or once per week, irrespective of the actual number of SDI runs performed. The cost is summed up from the charges for the individual runs.

=> SDI MFILE PACKAGE
=> SDI MFILE PACKAGE STANDARD

If the question *ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN?* is answered YES both duplicates between the databases in the same SDI run and duplicates from previous SDI runs (within the same database and between the databases in a multi-file profile) are removed. (Only duplicates from previous SDI runs within the last year are identified.)

=> FIL PATDPAFULL EPFULL PCTFULL

---

In this particular example there can't be any duplicates. So this question may be answered Y or N.
MULTI FILE SDI FILE SPECIFIC PARAMETERS: PCTFULL

ENTER COMPONENT SDI REQUEST NAME ('AA031/S') OR END: WOAIRBAG/S
ENTER QUERY L# FOR MULTI FILE SDI REQUEST OR END: L4
ENTER UPDATE FIELD CODE (UP) OR ?: ED
ENTER PRINT FORMAT (STD) OR ?: ALL
ARCHIVE ANSWERS? Y/(N): N
REDISTRIBUTE ANSWERS? Y/(N): N
ENTER MAXIMUM NUMBER OF HITS TO BE PRINTED PER RUN (100): .
SORT SDI ANSWER SET (N)/Y?: .
MULTI FILE SDI HAS BEEN SAVED AS SDI REQUEST 'AIRBAG/S'
QUERY L2 HAS BEEN SAVED AS SDI REQUEST 'DEAIRBAG/S' FOR FILE PATDPFULL
QUERY L3 HAS BEEN SAVED AS SDI REQUEST 'EPAIRBAG/S' FOR FILE EPFULL
QUERY L4 HAS BEEN SAVED AS SDI REQUEST 'WOAIRBAG/S' FOR FILE PCTFULL

These variations of SDI STANDARD are allowed:

=> SDI STANDARD PACKAGE
=> SDI PACKAGE STANDARD
=> SDI STANDARD PACKAGE MFILE
=> SDI PACKAGE STANDARD MFILE

52.3.7.1 Eliminating duplicates in a Multi-file SDI

During an SDI run the Accession Numbers found in a database are checked against previous runs and duplicates are removed if this has been requested (ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN? Y/(N): Y). The Accession Numbers found are saved for one year and will thus be used to identify duplicates for that period.

To identify duplicates in more than one database the same algorithm is used as for the DUPLICATE REMOVE command (e.g. Patent Numbers are compared), if the above question has been answered YES (the DUPLICATE command cannot be used in an automatic SDI). Please note:

- SDI runs are performed in each database at a different time, depending on the individual updates of the databases.
- It is not possible to choose a particular database to deliver the ‘original’ document. ‘Original’ document and duplicates are decided by the order in time of SDI runs in the databases.
- In databases containing family information (CAPLUS, DWPI) only the patent number of the Basic Patent is compared. So not all duplicates will be found.
- DUPLICATE does not work in the DPCI database.

52.3.8 SMARTTracker

In the CAPLUS database (or a multi-file including CAPLUS) a special ‘Multifile SDI’ can be issued that takes reference to a Structure Search result (in the REGISTRY file).

=> FILE REGISTRY

=》 STR 33069-62-4
: END
L1 STRUCTURE CREATED

=》 S L1 FUL
FULL SEARCH INITIATED 12:36:49 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4485 TO ITERATE
100.0% PROCESSED 4485 ITERATIONS 1741 ANSWERS
SEARCH TIME: 00.00.01

L2 1741 SEA SSS FUL L1

=> FIL CAPLUS

=》 S L2/THU AND P/DT
8100 L2
567412 THU/RL
5047 L2/THU
It is also possible to use the Standard option:

SMART STANDARD

Enter the Standard option:

SMART STANDARD

52.4 Saved queries

The profiles for a monitoring search can also be saved on the STN host using the SAVE command or on the local computer using command files if you do not want to issue a SDI command to the STN host. There may be various reasons for this:

- The monitoring is not to be done at regular intervals,
- The monitoring is not to be done after each update of the database but at longer intervals,
- The query needs to be adapted to new requirements frequently,
- The search profile uses certain commands not allowed in an SDI, such as SELECT, ANALYZE, TABULATE, FOCUS, FSEARCH, or FSORT.

52.4.1 The SAVE command

The SAVE command can be used to save a search profile under a name as a query:

=> SAVE INLINE/Q

From time to time this query can then be run with the ACTIVATE command and linked to the chosen update field:

=> ACTIVATE INLINE/Q

L16 QUE ABB=ON L5 OR L15

=> S L16 AND UP>20111101

L17 25 L16 AND UP>20111101

=> D 1-25 TRIAL
52.5 Support for command files by STN software

With the help of the STN Express communication package or STN on the Web a search profile can be prepared off-line and later be used on-line.

52.5.1 The ‘Run command file’ function of STN Express

With this function a complete search profile can be prepared, saved and run. When there are system prompts during the execution (e.g. due to a command being incomplete or certain options of the SET command) the run is paused. The answers to the prompts may then be entered, manual input being ended by hitting the ‘END’ key.

For this function, a number of commands from the script language of STN Express can be used:

<table>
<thead>
<tr>
<th>Character</th>
<th>Example</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/*</td>
<td>/* Command File</td>
<td>/* introduces a comment</td>
</tr>
<tr>
<td>=&gt;</td>
<td>=&gt; s acid and rain</td>
<td>=&gt; is a shortcut for SEND – the rest of the line will be sent to the host</td>
</tr>
<tr>
<td>_lnum</td>
<td>=&gt; s acid and rain_lnum</td>
<td>The resulting L number will be saved to the variable _lnum for later use. The variable name must begin with an underscore.</td>
</tr>
<tr>
<td>!</td>
<td>=&gt; s e1!</td>
<td>Stop the script run in order to manually enter data, e.g. the last E number.</td>
</tr>
</tbody>
</table>

52.5.1.1 Example: Command file for SDI ‘Producers of inline skates’, INPADOCDB database

```
/* SDI Inline Skates, INPADOCDB
=> S A63C0017-04+IPC /_IPC => _IPC
=> S (NORDICA) /PA, PA$ > _NAME1
=> S (BENETTON(S)SPORT?)/PA, PA$ > _NAME2
=> S (DEKA(S)PROD?)/PA, PA$ > _NAME3
=> S (SALOMON) /PA, PA$ > _NAME5
=> S (MGM (S)(SPA))/PA, PA$ > _NAME5
=> S (SkiS (S) ROSSI GNOL) /PA, PA$ > _NAME6
=> S _NAME1- _NAME6 > _NAME
=> S _IPC OR _NAME > _RESULT
```

Some syntactic errors in the search profile can be found by the software. If an error is seen after the ‘Run’ function has been started (e.g. a typo) the execution can be stopped. After the file has been edited execution can be re-started. It is a good idea to test-run the script in the (free) STNGUIDE database to find any errors concerning the STN command language (e.g. mismatched brackets, errors in the definition of variables, typos in commands or options, etc.).

52.5.2 The command window of STN Express

In STN Express from version 4 the search profile prepared off-line can be displayed in the command window during the on-line session. In the command window only commands of the STN command language may be used, the STN Express script language or any variables will not work.

Each command line can be issued individually, be edited during the on-line session or additional command lines can be entered or lines be left out or issued repeatedly. It is also possible to run the search profile without any interruption.

52.5.3 STN on the WEB

In STN on the Web a search profile prepared off-line can be copied to the command window by Copy/Paste (resize the window first). This should usually be short profiles which are then started by the SUBMIT button. The command lines cannot be issued one by one. For longer search profiles it is advisable to load the text file using the ‘Upload Command File’ function and start it then. In this case the command lines may even be issued one at a time. Special characters, e.g. for variables, cannot be used.
## 52.6 Patent types and country coverage

<table>
<thead>
<tr>
<th>Database</th>
<th>Patent types</th>
<th>Countries</th>
<th>Delay</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>International patent databases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DWPI</td>
<td>Patent applications and granted patents, utility models, Research Disclosure</td>
<td>40+ countries, incl. EP, WO</td>
<td>Weeks (depending on country)</td>
</tr>
<tr>
<td>INPADOCDB/INPAFAMDB</td>
<td>Patent applications and granted patents, utility models, legal status data</td>
<td>95 countries, incl. EP, WO</td>
<td>Days to weeks (depending on country)</td>
</tr>
<tr>
<td><strong>Regional patent databases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFULL</td>
<td>Patent applications and granted patents</td>
<td>EP</td>
<td>Some days</td>
</tr>
<tr>
<td>PCTFULL</td>
<td>Patent applications</td>
<td>WO</td>
<td>Some days</td>
</tr>
<tr>
<td><strong>National patent databases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUPATFULL</td>
<td>Patent applications and granted patents</td>
<td>AU</td>
<td>4 days</td>
</tr>
<tr>
<td>CANPATFULL</td>
<td>Patent applications and granted patents</td>
<td>CA</td>
<td>1-2 weeks</td>
</tr>
<tr>
<td>CNFULL</td>
<td>Patent applications and granted patents, utility models</td>
<td>CN</td>
<td>1-3 weeks</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>Patent applications and granted patents, utility models</td>
<td>DE</td>
<td>10 days</td>
</tr>
<tr>
<td>FRFULL</td>
<td>Patent and utility model applications</td>
<td>FR</td>
<td>1-2 weeks</td>
</tr>
<tr>
<td>GBFULL</td>
<td>Patent applications</td>
<td>GB</td>
<td>4 days</td>
</tr>
<tr>
<td>IFICLS</td>
<td>Legal status data</td>
<td>US</td>
<td></td>
</tr>
<tr>
<td>INFULL</td>
<td>Patent applications and granted patents</td>
<td>IN</td>
<td>4 days</td>
</tr>
<tr>
<td>JAPIO</td>
<td>Patent applications (unexamined)</td>
<td>JP</td>
<td>Approx. 4 months</td>
</tr>
<tr>
<td>KOREAPAT</td>
<td>Patent applications (unexamined), granted patents</td>
<td>KR</td>
<td>3 months</td>
</tr>
<tr>
<td>PATDPAFULL</td>
<td>Patent applications and granted patents, Utility model publications, Translations of EP documents (T2, T3, T4)</td>
<td>DE</td>
<td>DE: 0 days</td>
</tr>
<tr>
<td><strong>Field-specific databases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DGENE</td>
<td>Patent publications on nucleic and peptide sequences</td>
<td>See DWPI</td>
<td>Approx. 4 weeks to some months</td>
</tr>
<tr>
<td>DPCI</td>
<td>Patent applications and granted patents, examiner’s citations</td>
<td>23 countries, incl. EP, WO</td>
<td>See DWPI; citing patents: 3-6 weeks</td>
</tr>
<tr>
<td>IMSPATENTS</td>
<td>Patent applications and granted patents</td>
<td>78 countries, incl. EP, WO</td>
<td>No data available</td>
</tr>
<tr>
<td>PCTGENE</td>
<td>WO publications on nucleic and amino acid sequences</td>
<td>WO</td>
<td>Some days</td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td>Technical disclosure of inventions published in the ‘Research Disclosure’ journal</td>
<td>RD</td>
<td>14 days</td>
</tr>
<tr>
<td>USGENE</td>
<td>US patent publications on nucleic acids and peptide sequences</td>
<td>US</td>
<td>7 days</td>
</tr>
</tbody>
</table>
52.7 SDI frequency

When creating an SDI profile with the SDI command you can choose from a number of different SDI frequencies in some of the databases, i.e. at what interval the SDI run is to be executed.

<table>
<thead>
<tr>
<th>Database</th>
<th>Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>International patent databases</strong></td>
<td></td>
</tr>
<tr>
<td>DWPI</td>
<td>- Every update (every 3-4 days), (default)</td>
</tr>
<tr>
<td></td>
<td>- Weekly</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>INPADOCDB</td>
<td>- Every update (weekly), (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>HCA</td>
<td>Biweekly</td>
</tr>
<tr>
<td>HCAPLUS</td>
<td>- Every update (daily)</td>
</tr>
<tr>
<td></td>
<td>- Weekly (default)</td>
</tr>
<tr>
<td></td>
<td>- Biweekly</td>
</tr>
<tr>
<td><strong>Regional patent databases</strong></td>
<td></td>
</tr>
<tr>
<td>EPFULL</td>
<td>Every update (weekly)</td>
</tr>
<tr>
<td>PATDPA</td>
<td>No updates from week 25/2011</td>
</tr>
<tr>
<td>PCTFULL</td>
<td>Every update (weekly)</td>
</tr>
<tr>
<td><strong>National patent databases</strong></td>
<td></td>
</tr>
<tr>
<td>AUPATFULL</td>
<td>- Every update (weekly), (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>CANPATFULL</td>
<td>- Every update (weekly), (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>CNFULL</td>
<td>- Every update (weekly), (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>DEFULL</td>
<td>- Every update (weekly), (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>FRFULL</td>
<td>- Every update (weekly), (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>GBFULL</td>
<td>- Every update (weekly), (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>IFIALL</td>
<td>- Every update (twice per week)</td>
</tr>
<tr>
<td></td>
<td>- Weekly (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>IFICLS</td>
<td>- Every update (twice per week)</td>
</tr>
<tr>
<td></td>
<td>- Weekly (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>INFULL</td>
<td>- Every update (weekly), (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>JAPIO</td>
<td>Every update (monthly)</td>
</tr>
<tr>
<td>JPFULL</td>
<td>- Every update (weekly), (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>KOREAPAT</td>
<td>Every update (monthly)</td>
</tr>
<tr>
<td>PATDPAFULL</td>
<td>Every update (weekly)</td>
</tr>
<tr>
<td>RUSSIAPAT</td>
<td>Every update (monthly)</td>
</tr>
<tr>
<td>USPATFULL/</td>
<td>- Every update (twice per week)</td>
</tr>
<tr>
<td>USPAT2</td>
<td>- Weekly (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td><strong>Field-specific databases</strong></td>
<td></td>
</tr>
<tr>
<td>DGENE</td>
<td>Every update (biweekly)</td>
</tr>
<tr>
<td>DPCI</td>
<td>- Every update (weekly), (default)</td>
</tr>
<tr>
<td></td>
<td>- Monthly</td>
</tr>
<tr>
<td>IMSPATENTS</td>
<td>Every update (monthly)</td>
</tr>
<tr>
<td>PCTGEN</td>
<td>Every update (weekly)</td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td>Every update (monthly)</td>
</tr>
<tr>
<td>USGENE</td>
<td>Every update (weekly)</td>
</tr>
</tbody>
</table>
Types of search

52.8 Information on timeliness: HCAPLUS and IFIALL

Patents are added to the CA/HCA/ZCA and CAPLUS/HCAPLUS/ZCAPLUS databases with a delay of some days after publication. At that point the indexing is likely not to be complete, it may take up to two months until a document is completely indexed. For a number of countries, namely US, EP, DE, JP, WO, GB, and FR the current status of the indexing process can be established.

A number of applications are possible:

- NEWS FILE: Information on the Updating and Patent Currency
- Include to a DISPLAY or PRINT: DISPLAY CURRENCY
- Include into SDI

More information on updates can be found on:


The IFIALL database is updated two times per week. Documents are entered between one day and one week after publication. Use NEWS FILE to see information on updates.

52.9 Search fields for awareness searches

52.9.1 Overview

<table>
<thead>
<tr>
<th>Database</th>
<th>Field</th>
<th>Linked SDI</th>
<th>Entered upon/usable for</th>
</tr>
</thead>
<tbody>
<tr>
<td>International patent databases</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INPADOCDB (record)</td>
<td>/EDP</td>
<td>–</td>
<td>New initial publications (first entry)</td>
</tr>
<tr>
<td>INPADOCDB (member)</td>
<td>/ED</td>
<td>–</td>
<td>New initial publications and further national publications</td>
</tr>
<tr>
<td></td>
<td>/EDPR</td>
<td>–</td>
<td>New priority number entries</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td>–</td>
<td>New initial publications, further national publications, corrections to bibliographical data and classifications</td>
</tr>
<tr>
<td></td>
<td>/UPBB</td>
<td>–</td>
<td>Changes to bibliographical details</td>
</tr>
<tr>
<td></td>
<td>/UPCC</td>
<td>–</td>
<td>Changes to classification</td>
</tr>
<tr>
<td></td>
<td>/UPLS</td>
<td>(L) proximity</td>
<td>New legal status information</td>
</tr>
<tr>
<td></td>
<td>/EDLS</td>
<td>–</td>
<td>New initial publications and further national publications or new legal status information (ED+UPLS)</td>
</tr>
<tr>
<td></td>
<td>/UPM</td>
<td>–</td>
<td>All changes to bibliographical details, classifications and legal status information (UP+UPLS), usable only within an SDI command</td>
</tr>
<tr>
<td>INPADOCDB – Family SDI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>/EDF</td>
<td>–</td>
<td>Initial entry of a patent Family</td>
</tr>
<tr>
<td></td>
<td>/UPFD</td>
<td>–</td>
<td>New family member (new Document)</td>
</tr>
<tr>
<td></td>
<td>/UPFP</td>
<td>–</td>
<td>New national Publication (new level)</td>
</tr>
<tr>
<td></td>
<td>/UPFB</td>
<td>–</td>
<td>Change to Bibliographical details in the patent family</td>
</tr>
<tr>
<td></td>
<td>/UPFC</td>
<td>–</td>
<td>Changes in the patent family (combining or splitting of families)</td>
</tr>
<tr>
<td></td>
<td>/UPFL</td>
<td>–</td>
<td>Change to the Legal Status in the patent family</td>
</tr>
<tr>
<td></td>
<td>/UPFE</td>
<td>–</td>
<td>New publication level and legal status changes in the patent family from update week 2004/36</td>
</tr>
<tr>
<td></td>
<td>/UPFA</td>
<td>–</td>
<td>All changes in the patent family</td>
</tr>
<tr>
<td>INPAFAMDB – Family SDI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>/EDF</td>
<td>–</td>
<td>First entry of a patent family</td>
</tr>
<tr>
<td></td>
<td>/UPFB</td>
<td>–</td>
<td>Changes to Bibliographical details within the patent family, new family member, new national Publication (new level) (UPFB includes /UPFD and /UPFP)</td>
</tr>
<tr>
<td></td>
<td>/UPBB</td>
<td>–</td>
<td>Changes to bibliographical details</td>
</tr>
<tr>
<td></td>
<td>/UPCC</td>
<td>–</td>
<td>Changes to classifications</td>
</tr>
<tr>
<td></td>
<td>/UPFC</td>
<td>–</td>
<td>Changes in the patent family (combining or splitting of families)</td>
</tr>
<tr>
<td></td>
<td>/UPLS</td>
<td>(L) proximity</td>
<td>New legal status information</td>
</tr>
<tr>
<td></td>
<td>/UPFE</td>
<td>–</td>
<td>New publication level and legal status changes in the patent family from update week 2004/36</td>
</tr>
<tr>
<td></td>
<td>/UPFA</td>
<td>–</td>
<td>All changes in the patent family</td>
</tr>
</tbody>
</table>
### Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>Database, Field</th>
<th>Linked SDI</th>
<th>Entered upon/usable for</th>
</tr>
</thead>
<tbody>
<tr>
<td>DWPI, Invention level</td>
<td>/ED</td>
<td>New documents (= new Basic)</td>
</tr>
<tr>
<td>/UP</td>
<td>New documents, equivalents and corrections</td>
<td></td>
</tr>
<tr>
<td>/DW</td>
<td>New documents, equivalents and corrections</td>
<td></td>
</tr>
<tr>
<td>/DW.B</td>
<td>New documents (= new Basics)</td>
<td></td>
</tr>
<tr>
<td>/UPAB</td>
<td>Documents with abstracts, additional abstracts or changes to the abstract (Basic or Equivalent)</td>
<td></td>
</tr>
<tr>
<td>/UPP</td>
<td>(P) proximity New Basics or Equivalents or other family information</td>
<td></td>
</tr>
<tr>
<td>/UPEQ</td>
<td>New Equivalents</td>
<td></td>
</tr>
<tr>
<td>/UPIC</td>
<td>Update IPC Reform Reclassification</td>
<td></td>
</tr>
<tr>
<td>/UPNC</td>
<td>Update US Reclassifications</td>
<td></td>
</tr>
<tr>
<td>/UPEC</td>
<td>Update ECLA Classifications</td>
<td></td>
</tr>
<tr>
<td>/UPFT</td>
<td>Update F-Terms and FI-Terms</td>
<td></td>
</tr>
<tr>
<td>/UPGI</td>
<td>New Image</td>
<td></td>
</tr>
<tr>
<td>/UPPA</td>
<td>New Patent Assignee</td>
<td></td>
</tr>
<tr>
<td>/UPIN</td>
<td>New Inventor</td>
<td></td>
</tr>
<tr>
<td>/UPPR</td>
<td>New Priority information</td>
<td></td>
</tr>
<tr>
<td>/UPTI</td>
<td>Entry or update of the Derwent Title (e.g. for minor countries)</td>
<td></td>
</tr>
<tr>
<td>/UPIT, UPKW</td>
<td>New Keyword Indexing</td>
<td></td>
</tr>
<tr>
<td>/UPCR</td>
<td>New compounds in the DCR segment</td>
<td></td>
</tr>
<tr>
<td>/UPWX</td>
<td>Citing of DCR compounds in the bibliographical records (for SDI in the DCR segment)</td>
<td></td>
</tr>
<tr>
<td>/UPA</td>
<td>New Indexing (Polymer Codes)</td>
<td></td>
</tr>
<tr>
<td>/UPB</td>
<td>New Indexing (Chemical Codes)</td>
<td></td>
</tr>
<tr>
<td>DWPI, publication level</td>
<td>/UPAA</td>
<td>New author abstract</td>
</tr>
<tr>
<td>/UPAT</td>
<td>New author title</td>
<td></td>
</tr>
<tr>
<td>/UPCL</td>
<td>New claim</td>
<td></td>
</tr>
<tr>
<td>/UPIO</td>
<td>New original IPC</td>
<td></td>
</tr>
<tr>
<td>/UPNO</td>
<td>New original USCL</td>
<td></td>
</tr>
<tr>
<td>(H)CA</td>
<td>/ED</td>
<td>New documents with indexing</td>
</tr>
<tr>
<td>/UP</td>
<td>New documents and all changes, except changes to the patent family</td>
<td></td>
</tr>
<tr>
<td>/UPP</td>
<td>(L) proximity Changes to the patent family</td>
<td></td>
</tr>
<tr>
<td>(H)CAPLUS</td>
<td>/ED</td>
<td>New documents (still without indexing)</td>
</tr>
<tr>
<td>/UP</td>
<td>New documents and all changes, except changes to the patent family</td>
<td></td>
</tr>
<tr>
<td>/UPI</td>
<td>Indexing</td>
<td></td>
</tr>
<tr>
<td>/UPTI</td>
<td>Addition of registered substance</td>
<td></td>
</tr>
<tr>
<td>/UPM</td>
<td>(L) proximity New documents and all changes, including changes to the patent family</td>
<td></td>
</tr>
</tbody>
</table>

**Regional patent databases**

| EPFULL | /EDP | New initial publications (first entry) |
| /ED | New initial publications and further publications by the EPO |
| /UP | New documents, updates and changes |
| /UPLS | (P) proximity New legal status information |
| PCTFULL | /ED | New documents |
| /UP | New documents and changes |
| PATDPA | /ED | New documents (date is never changed) |
| /DED | New documents or publications within the family (date is changed) |
| /UP | All publications and changes, including legal status (retrospective) |
| /UPA8 | Amendments to abstract or main claim |
| /UPNT | (P) proximity New legal status information (retrospective) |
| /UPPA | New patent assignee |
### Types of search

<table>
<thead>
<tr>
<th>Database</th>
<th>Field</th>
<th>Linked SDI</th>
<th>Entered upon/usable for</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National patent databases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUPATFULL</td>
<td>/ED</td>
<td></td>
<td>New initial publications and further national publications</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents, updates and changes</td>
</tr>
<tr>
<td></td>
<td>/EDTX</td>
<td></td>
<td>ED for fulltext</td>
</tr>
<tr>
<td>CANPATFULL</td>
<td>/ED</td>
<td></td>
<td>New initial publications and further national publications</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents, updates and changes</td>
</tr>
<tr>
<td></td>
<td>/EDTX</td>
<td></td>
<td>ED for fulltext</td>
</tr>
<tr>
<td>CNFULL</td>
<td>/ED</td>
<td></td>
<td>New initial publications and further national publications</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents, updates and changes</td>
</tr>
<tr>
<td></td>
<td>/EDTX</td>
<td></td>
<td>ED for fulltext</td>
</tr>
<tr>
<td>DDEFAULT</td>
<td>/ED</td>
<td></td>
<td>New initial publications and further national publications</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents, updates and changes</td>
</tr>
<tr>
<td></td>
<td>/EDTX</td>
<td></td>
<td>ED for fulltext</td>
</tr>
<tr>
<td>FRANCEPAT</td>
<td>/ED</td>
<td></td>
<td>New documents, initial publications</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents, updates and changes, including to the legal status</td>
</tr>
<tr>
<td>FRFULL</td>
<td>/ED</td>
<td></td>
<td>New documents, initial publications</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents, initial publications (ED=UP)</td>
</tr>
<tr>
<td>GBFULL</td>
<td>/ED</td>
<td></td>
<td>New documents, initial publications</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents, initial publications (ED=UP)</td>
</tr>
<tr>
<td>IFIALL</td>
<td>/ED</td>
<td></td>
<td>New documents</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents and corrections</td>
</tr>
<tr>
<td>IFICLS</td>
<td>/ED</td>
<td></td>
<td>New documents</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents and corrections</td>
</tr>
<tr>
<td>INFULL</td>
<td>/ED</td>
<td></td>
<td>New documents</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents and corrections</td>
</tr>
<tr>
<td></td>
<td>/EDTX</td>
<td></td>
<td>ED for fulltext</td>
</tr>
<tr>
<td>JAPIO</td>
<td>/ED</td>
<td></td>
<td>New documents</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents and corrections</td>
</tr>
<tr>
<td>JPFULL</td>
<td>/ED</td>
<td></td>
<td>neue Dokumenten</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>neue Dokumente und Korrekturen</td>
</tr>
<tr>
<td></td>
<td>/EDTX</td>
<td></td>
<td>ED für Volltext</td>
</tr>
<tr>
<td>KOREAPAT</td>
<td>/ED</td>
<td></td>
<td>New documents</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents and corrections</td>
</tr>
<tr>
<td>PATDD</td>
<td>/ED</td>
<td></td>
<td>New documents</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents, updates and changes, including certain legal status changes (e.g. patent assignee) – manual monitoring only</td>
</tr>
<tr>
<td>PATDPAFULL</td>
<td>/ED</td>
<td></td>
<td>New documents and updates</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents, updates and changes</td>
</tr>
<tr>
<td>USPATFULL</td>
<td>/ED</td>
<td></td>
<td>New documents</td>
</tr>
<tr>
<td>USPAT2</td>
<td>/UP</td>
<td></td>
<td>New documents, updates and changes</td>
</tr>
<tr>
<td></td>
<td>/UPCA</td>
<td></td>
<td>New documents with CA indexing</td>
</tr>
<tr>
<td><strong>Field-specific databases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DGENE</td>
<td>/ED</td>
<td></td>
<td>New documents</td>
</tr>
<tr>
<td></td>
<td>/DED</td>
<td></td>
<td>Date of receipt of new documents with the database producer</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>Same as /ED</td>
</tr>
<tr>
<td>DPCI</td>
<td>/ED</td>
<td></td>
<td>New documents (= new Basic)</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>All changes</td>
</tr>
<tr>
<td></td>
<td>/UPD</td>
<td></td>
<td>New cited documents</td>
</tr>
<tr>
<td></td>
<td>/UPG</td>
<td></td>
<td>New citing documents</td>
</tr>
<tr>
<td></td>
<td>/PCIW</td>
<td></td>
<td>All changes, PCI-week</td>
</tr>
<tr>
<td></td>
<td>/PCIW.G</td>
<td></td>
<td>New citing documents, PCI-week</td>
</tr>
<tr>
<td></td>
<td>/DW</td>
<td></td>
<td>All changes, Derwent week</td>
</tr>
<tr>
<td></td>
<td>/DW.B</td>
<td></td>
<td>New documents (= new Basic), Derwent week</td>
</tr>
<tr>
<td>IMSPATENTS</td>
<td>/ED</td>
<td></td>
<td>New documents (= substances or patent families)</td>
</tr>
<tr>
<td></td>
<td>/DED</td>
<td></td>
<td>Publication date in ‘Patents International’</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents and changes</td>
</tr>
<tr>
<td>RDISCLOSURE</td>
<td>/UP</td>
<td></td>
<td>New documents</td>
</tr>
<tr>
<td>USGENE</td>
<td>/ED</td>
<td></td>
<td>New documents</td>
</tr>
<tr>
<td></td>
<td>/UP</td>
<td></td>
<td>New documents, updates and corrections</td>
</tr>
</tbody>
</table>
52.9.2 Using the /UPAB fields in DWPI and PATDPA

In the DWPI database it may occur that documents are entered without an abstract and abstracts are added at a later date or not at all. In PATDPA the same problem exists: The abstracts or main claims of certain document types are added at a later date, for some document types no abstracts or claims are entered (DECE: serial number for EP applications with DE designation, .DET1: translation of WO documents).

When to prefer /UP over /UPAB: Documents without an abstract will be found. All changes are monitored. In case of a free text search it may be that documents relevant to the search are not retrieved: On date A (no abstract available) they are not found because the words searched do not occur in the text available, on date B (abstract available) they are not found due to a new UP date used.

When to prefer /UPAB over /UP: A document will only be retrieved once an abstract is available. Hence this field should be preferred with free text searches. Only changes to the abstract or main claim are considered. Documents not having an abstract will not be retrieved.

52.9.3 Linked update fields / Linked SDI

In addition to the /ED and /UP fields there are fields covering only certain types of data entered or updated. With the help of these fields a current awareness search can be targeted more precisely (e.g. UPP, UPAB).

52.9.3.1 Linking the PI field with /UPP

In the DWPI and CAPLUS databases it is possible to link a search query concerning the PI field (PN, PK) to the respective update field by using (P) or (L) proximity. This way the search can be narrowed further. For example, using the command

```
=> S EPB#/PK (P) (20101112-20101211)/UPP
```

in DWPI will narrow the search to updates in the PI field through use of UPP and there to updates for EP granted patents only through use of (P) proximity.

```
=> FIL WPIND
=> S EPB#/PK AND (20101112-20101211)/UPP
L1 1027681 EPB#/PK 226136 (20101112-20101211)/UPP
L2 18685 EPB#/PK AND (20101112-20101211)/UPP
```

In the CAPLUS database the UPP field can be linked to a search query by (L) proximity:

```
=> S DE/PC (L) UPP>20101213
```

52.9.3.2 Linking the legal status with /UPLS

When using (L) proximity with the /UPLS field in INPADOCDB/INPAFAMDB only legal status entries of that particular date will be retrieved.

```
=> S EP17P/LSC(L)20101202/UPLS
L5 2353 EP17P/LSC(L)20101202/UPLS

=> S EP17P/LSC AND 20101202/UPLS
L6 235609 EP17P/LSC AND 20101202/UPLS
```

Linking the legal status code with the UPLS update date is also useful in EPFULL (use (P) proximity):

```
=> FIL EPFULL
=> S SONY/PA AND EPB235/LSC (P) UPLS>20100909
L3 21 SONY/PA AND EPB235/LSC (P) UPLS>20100909
```
Types of search

52.9.3.3 Linking bibliographical details with various Update fields in INPADOCDB/INPAFAMDB

Owing to the database structure in INPADOCDB (each publication in the national succession of publications forms one level/segment in the database document) it is possible to link bibliographical details to Update fields. Using (L) proximity it is possible to limit the search by bibliographical detail to one publication level. This also works in INPAFAMDB. These fields can be used: /EDP, /ED, /UP, /UPBB, /UPCC (see table above).

A number of useful examples are shown below:

<table>
<thead>
<tr>
<th>Example</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPB#/pk(ED&gt;20100101)</td>
<td>For EP granted</td>
</tr>
<tr>
<td>granted/stal(ED&gt;20100101)</td>
<td>For all granted</td>
</tr>
<tr>
<td>(au or nz)/pc(ledp&gt;20100101)</td>
<td>For priority applications from AU and NZ</td>
</tr>
<tr>
<td>sony/lspa(upls&gt;20100101)</td>
<td>For legal status changes concerning SONY</td>
</tr>
<tr>
<td>a61k/ipc,epc(l)upcc&gt;20100101</td>
<td>For changes to IPC or EPC</td>
</tr>
</tbody>
</table>

52.9.4 Dynamic queries

To use this ‘Linked SDI’ in automatic SDI runs this issue was to be solved:

The update field used when the SDI is set up is linked to the search queries by AND – but a proximity operator is needed.

A symbolic search field of the form ‘update_field_code/LAST’ was introduced. This symbolic search field is edited by the Messenger system to a range search on the data of the latest Update range in the field given. To create an automatic SDI in DWPI linking the UPP field by (P) proximity to the PK field the appropriate commands would be:

```plaintext
=> S SIEI/PACO AND EPB#/PK(P)UPP/LAST
L4  1047 SIEI/PACO AND EPB#/PK(P)UPP/LAST

=> SDI
ENTER QUERY L# FOR SDI REQUEST OR (END): L4
ENTER UPDATE FIELD CODE (UP), ED, UPP, UPAB, UPCR, EDCR, UPWX, UPB, UPKW, UPA, UPTC, UPEQ OR ?: UPP
...
```

Dynamic queries can currently be created in the DWPI, DPCI, and INPADOCDB/INPAFAMDB databases.

**Note:** If /LAST is used in a manual search the past year is automatically used in order to allow testing and creating the SDI profile. /LAST cannot be used to manually monitor publications.

52.9.5 Notes on INPADOCDB/INPAFAMDB

52.9.5.1 Display of changes to the document

The CHG field. The CHG display field indicates fields where changes have occurred. The contents of the field can even be searched. The added letters mean: A = AMEND / MODIFIED and C= CHANGED / NEW.

```plaintext
=> E E/CHG
E1  38766 DS A/CHG
E2   93 DS C/CHG
E3   0 ... E/CHG
E4  469033 EPC A/CHG
E5  159166 EPC C/CHG
E6  14475 IC A/CHG
E7   97 IC C/CHG
E8  151806 I CO A/CHG
E9  109573 I CO C/CHG
E10  440 I DT A/CHG
E11  245 I DT C/CHG
E12  42344 I N A/CHG

=> S IN C/CHG AND PA C/CHG AND EPC C/CHG
L1  397 I N C/CHG AND PA C/CHG AND EPC C/CHG

=> D B I B. M CHG. M
L1  ANSWER 1 OF 397 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
```
Guide to STN Patent Databases

AN 53024119 INPADOCDB  ED 20070426 EW 200717 UP 20070705 UW 200727
TI COMBINATION ANTENNA WITH MANY FEEDING POINTS.
TL English
IN FINN LARRY WILLIAM; BURRELL DENNIS A; FRAGA JOHNNY C; GERTEN LEO J; UTZ JAMES ROE
INS FINN LARRY WILLIAM; BURRELL DENNIS A; FRAGA JOHNNY C; GERTEN LEO J; UTZ JAMES ROE
PA DELL PRODUCTS LP
PAS DELL PRODUCTS LP
DT Patent
PI JP 2007082179 A 20070329
PIT JPA DOC. LAID OPEN TO PUBL. INSP. [PUBLISHED FROM 1971 ON]
DAV 20070329 unexamined-printed-without-grant
STA PRE-GRA NT PUBLICATION
AI JP 2006-123842 A 20060427
AIT JPA Patent application
PRAI US 2005-227402 A 20050915 (USA, 20070322)
PRAIT USA Patent application
CHG EPC C; PAS C; PA C; INS C; IN C; TI C

For the following fields the changes are indicated:
ABDE Abstract in German
ABEN Abstract in English
ABES Abstract in Spanish
ABFR Abstract in French
ABOL Abstract in original language
ABOR Abstract in original non-ASCII character set
AI Application information
AIOR Application information, original form
CIT Citations
DF Date in Force (Advertizing German Utilities)
DS Designated States
EPC European Patent Classification (ECLA A-H)
IC International Patent Classification version 1-7
ICO In Computer Only (ECLA K-Y)
IDT Indeling der Techniek
IN Inventor
INOR Inventor, original character set
INS Inventor, standardized
IPC International Patent Classification (current and old)
NCL National Patent Classification
PA Patent Assignee
PAOR Patent Assignee, original character set
PAS Patent Assignee, standardized
PI Patent information
PRAI Priority information
PRAO Priority information, original form
TI Title
TIOR Title, original character set

52.9.5.2 Displaying changes to the patent family

Patent families may have to be combined into one e.g. if several national families (e.g. US) are combined into a new family by a EP or a WO application. A patent family may have to be divided if due to errors, e.g. in the priority numbers, certain members were wrongly entered into the family. In both cases it can happen that family members are missing in a monitoring search result. To prevent this the field UPFC (UPdate Family Changed) was introduced, which is displayed in the BIB, STD, ALL, MAX, FFAM, UPALL and BRIEF display formats. After each SDI search run the new documents should be reviewed or (by a search) be checked whether a change to the family is displayed. If that is the case, the complete family should be reviewed:

AN 59373185 INPADOCDB ED 20090917 EW 200938 UP 20090917 UW 200938
FN 38377924 UPFC 20091001

396
Types of search

| TI | Networked gaming system communication protocols and methods. |
| TL | English |
| IN | KELLY BRYAN M.; LOCKARD DENNIS; TALLCOTT JEFFREY; KROECKEL JOHN; SOLITERMAN GENNADY; RUPANAGUDI REDDY |
| INS | KELLY BRYAN M; LOCKARD DENNIS; US; TALLCOTT JEFFREY, US; KROECKEL JOHN, US; SOLITERMAN GENNADY, US; RUPANAGUDI REDDY, US |
| PAS | KELLY BRYAN M; LOCKARD DENNIS; TALLCOTT JEFFREY; KROECKEL JOHN; SOLITERMAN GENNADY; RUPANAGUDI REDDY |

52.9.6 Monitoring patent families in INPADOCDB/INPAFAMDB—Family SDI

In INPADOCDB/INPAFAMDB it is possible to monitor patent families (manually or automatically). The fields for this see in the table above. Any event occurring to the patent family can be found this way, from the first entry of a family member to changes to the legal status. Here are some notes on the update fields:

If certain update fields are set the same date will automatically be entered in other update fields (INPADOCDB):

- EDF → UPFD, UPFF, UPFB, UPFE, UPFA
- UPFD → UPFF, UPFB, UPFE, UPFA
- UPFP → UPFB, UPFE, UPFA
- UPFB → UPFA

Using DISPLAY UPALL the table of updates can be displayed for every document.

Thanks to the database structure of INPAFAMDB it is easy to monitor patent families in this database. All update codes in this database relate to the patent family.

In INPADOCDB both record-based and family-based monitoring can be done. The following table shows the relevant fields:

<table>
<thead>
<tr>
<th>New family (new family number FN)</th>
<th>Record (INPADOCDB)</th>
<th>Family (INPADOCDB)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EDF</td>
<td>EDF</td>
</tr>
<tr>
<td>Merged or split families</td>
<td>-</td>
<td>UPFC</td>
</tr>
<tr>
<td>New record (member)</td>
<td>EDP</td>
<td>UPFD</td>
</tr>
<tr>
<td>New document</td>
<td>ED</td>
<td>UPFP</td>
</tr>
<tr>
<td>Update of BIB + IND</td>
<td>UP</td>
<td>UPFB</td>
</tr>
<tr>
<td>Update of BIB</td>
<td>UPBB</td>
<td>UPBB</td>
</tr>
<tr>
<td>Update of IND</td>
<td>UPCC</td>
<td>UPCC</td>
</tr>
<tr>
<td>Update of the legal status (LS)</td>
<td>UPLS</td>
<td>UPFL</td>
</tr>
</tbody>
</table>
Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>Record (INPADOCDB)</th>
<th>Family (INPADOCDB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New document or LS</td>
<td>EDLS</td>
</tr>
<tr>
<td>All updates / changes</td>
<td>UPFE</td>
</tr>
<tr>
<td></td>
<td>UPM</td>
</tr>
<tr>
<td></td>
<td>UPFA</td>
</tr>
</tbody>
</table>

The display formats for updates only show data of the current update week. ‘Element billing’ applies to all these formats, i.e. you will be charged only for data that actually appear in the display.

FFAMUP | All BIB and/or LSUP of family members updated with the current update, weekly SDI
FFAMUP4 | All BIB and/or LSUP of family members updated with the current update, monthly SDI

FFAMUP, e.g. FFAMUP.ED (only for these countries: PC=AT AU BE CA CH DE DK EP ES FI FR GB GR IE IL IT JP HU NL NO SE US WO)

FFAMED | New publications and/or LSUP of a patent family, weekly SDI
FFAMED4 | New publications and/or LSUP of a patent family, monthly SDI

FFAMED, e.g. FFAMED.US (only for these countries: PC=AT AU BE CA CH DE DK EP ES FI FR GB GR IE IL IT JP HU NL NO SE US WO)

LFAMUP | PI (Publication Information) and LSUP (legal status changed) of the current update week of a patent family, weekly SDI
LFAMUP4 | PI (Publication Information) and LSUP (legal status changed) of the current update week of a patent family, monthly SDI

LFAMUP, e.g. LFAMUP.FR (only for these countries: PC= AT AU BE CA CH DE DK EP ES FI FR GB NL NO SE US WO)

LFAMUP, e.g. LFAMUP.FR (only for these countries: PC= AT AU BE CA CH DE DK EP ES FI FR GB NL NO SE US WO)

UPALL | Table of update dates

The update fields needed for a Family SDI are available if any update has occurred to the patent family since the introduction of this feature (9/2004). (This may be important in a retrospective search if you wish to use any of the UP fields.)

=> D BIB UPALL

AN  53039753 INPADOCDB ED 20070505 EW 200718 UP 20070505 UW 200718
TI Verfahren und Vorräicht zur Speicherung und Verteilung von Verschlüsselungsschlüsseln.
Procede et dispositif pour stocker et distribuer des clés de cryptage.
TL German; English; French
IN SOWA, HANS CHRISTOPHER; MCDONALD, DANIEL J.; CHATER-LEA, DAVID J.; KREMSKE, RANDY; PAPPAS, SCOTT J.; JOHUR, JASON; NEWKIRK, DENNIS; ANDERSON, WALTER F.; WALTON, GLENN BRIAN
INS SOWA HANS CHRISTOPHER, US; MCDONALD DANIEL J, GB; CHATER-LEA DAVID J, GB; KREMSKE RANDY, US; PAPPAS SCOTT J, US; JOHUR JASON, GB; NEWKIRK DENNIS, GB; ANDERSON WALTER F, US; WALTON GLENN BRIAN, GB
PA MOTOROLA, INC.
PAS MOTOROLA INC, US
DT Patent
PI EP 1777870 A3 20070502 English
PIT EPA3 SEARCH REPORT
DAV 20070502 supplemental-srep-reference
STA PRE-GRANT PUBLICATION
DS R: AT BE CH CY DE DK ES FI FR GB GR IE IL IT LU MC NL PT SE TR
AI EP 2006-26909 A 20020118
AIT EPA Patent application
PRAI US 2001-785849 A 20010216 (USA)
PRAI EP 2002-720815 A 20020118 (EPA3, 20070419)
PRAIT USA Patent application
EPA3 Prior application claimed for a division
Types of search

AN 53039753
UP 20070505
ED 20070505
EDP 20070426
EDF 20070222
UPFD 20070426
UPFP 20070505
UPFB 20070505
UPFL 20070505
UPBB 20070505
UPCC 20070505

=> D FAM
L13 ANSWER 1 OF 129 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN

PATENT FAMILY INFORMATION
AN 53039753 INPADOCDB

+------------------------+------------------------+
EP 2006-26910 A 20020118
EP 2006-26911 A 20020118
EP 2006-26912 A 20020118
EP 2006-26913 A 20020118
US 2001-785849 A 20010216
AT 2002-720815 T 20020118
AU 2002-251789 A 20020118
DE 2002-60218289 A 20020118
EP 2002-720815 A 20020118
EP 2006-26909 A 20020118
EP 2006-26910 A 20020118
EP 2006-26911 A 20020118
EP 2006-26912 A 20020118
EP 2006-26913 A 20020118
IL 2002-157049 A 20020118
US 2001-785849 A 20010216
WO 2002-US1479 W 20020118
AU 2002-251789 A 20020118
DE 2002-60218289 A 20020118
EP 2002-720815 A 20020118
IL 2002-157049 A 20020118

+------------------------+------------------------+
AT 2002-720815 T 20020118 AT 3548987 T 20070315
AU 2002-251789 A 20020118 AU 2002251789 A1 20020904
DE 2002-60218289 A 20020118 DE 60218289 D1 20070405
EP 1362444 A4 20040707
EP 1362444 B1 20070221
EP 2006-26909 A 20020118 EP 1777870 A2 20070425
EP 1777870 A3 20070502

=> D F FamUp
L13 ANSWER 1 OF 129 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN

AN 53039753 INPADOCDB ED 20070426 EW 200717 UP 20070505 UW 200718
TI Verfahren und Vorrichtung zur Speicherung und Verteilung von Verschlüsselungsschlüsseln.
Method and apparatus for storing and distributing encryption keys.

TL German; English; French
IN SOWA, HANS CHRISTOPHER; MCDONALD, DANIEL J.; CHATER-LEA, DAVID J.; KREMSKE, RANDY; PAPPAS, SCOTT J.; JOHUR, JASON; NEWKIRK, DENNIS; ANDERSON, WALTER F.; WALTON, GLENN BRIAN
PA MOTOROLA, INC.
Guide to STN Patent Databases

PAS MOTOROLA INC, US
DT Patent
PI EP 1777870 A2 20070425 English
PIT EPA2 APPLICATION PUBLISHED WITHOUT SEARCH REPORT
DAV 20070425 unexamined printed without grant
STA PRE-GRA NT PUBLICATION
DS R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
AI EP 2006-26909 A 20020118
A IT EPA Patent application
PRAI US 2001-785849 A 20010216 (USA)
EP 2002-720815 A 20020118 (EPA3, 20070419)
PRAI USA Patent application
EPA3 Prior application claimed for a division
IPCI H04L0009-08 [I,A]; H04Q0007-38 [I,A]; H04L0009-08 [I,C*]; H04Q0007-38 [I,C*]
IPCR H04L0029-06 [I,A]; H04Q0007-28 [N,A]
H04L0029-06 [I,C*]; H04Q0007-28 [N,C*]
EPC H04Q0007-38S; H04L0009-08B; H04L0009-32R; H04L0029-06C6B;
H04L0029-06C6C2; H04W0006-02; H04W0006-06
ICO T04L0029-06C6D6; T04Q0007-28; T04Q0007-38A; T04W00050:04T
FA AI; AN; DAV; DS; DT; ED; EPC; EW; ICO; IN; INS; IPC; IPCI; IPCR; LA; PA;
PAS; PI; PIT; PRAI; REN; REP; REXP; TI
CHG CIT A

AN 53039753 INPADOCDB ED 20070505 EW 200718 UP 20070505 UW 200718
TI Verfahren und Vorrichtung zur Speicherung und Verteilung von
Verschlüsselungsschlüsseln,
Method and apparatus for storing and distributing encryption keys.
Procede et dispositif pour stocker et distribuer des cle's de cryptage.
TL German; English; French
IN SOWA, HANS CHRISTOPHER; MCDONALD, DANIEL J.; CHATER-LEA, DAVID J.;
KREMSKE, RANDY; PAPPAS, SCOTT J.; JOHUR, JASON; NEWKIRK, DENNIS;
ANDERSON, WALTER F.; WALTON, GLENN BRIAN
INS SOWA HANS CHRISTOPHER, US; MCDONALD DANIEL J, US; CHATER-LEA DAVID J, GB;
KREMSKE RANDY, US; PAPPAS SCOTT J, US; JOHUR JASON, GB; NEWKIRK DENNIS,
US; ANDERSON WALTER F, US; WALTON GLENN BRIAN, GB
PA MOTOROLA, INC.
PAS MOTOROLA INC, US
DT Patent
PI EP 1777870 A3 20070502 English
PIT EPA3 SEARCH REPORT
DAV 20070502 supplemental -s rep-re ference
STA PRE-GRA NT PUBLICATION
DS R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
AI EP 2006-26909 A 20020118
A IT EPA Patent application
PRAI US 2001-785849 A 20010216 (USA)
EP 2002-720815 A 20020118 (EPA3, 20070419)
PRAI USA Patent application
EPA3 Prior application claimed for a division
IPCI H04L0009-08 [I,A]; H04Q0007-38 [I,A]; H04L0009-08 [I,C*]; H04Q0007-38 [I,C*]
IPCR H04L0029-06 [I,A]; H04Q0007-28 [N,A]
H04L0029-06 [I,C*]; H04Q0007-28 [N,C*]
EPC H04Q0007-38S; H04L0009-08B; H04L0009-32R; H04L0029-06C6B;
H04L0029-06C6C2; H04W0006-02; H04W0006-06
ICO T04L0029-06C6D6; T04Q0007-28; T04Q0007-38A; T04W00050:04T
FA AI; AN; DAV; DS; DT; ED; EPC; EW; ICO; IN; INS; IPC; IPCI; IPCR; LA; PA;
PAS; PI; PIT; PRAI; REN; REP; REXP; TI
CHG CIT A

LEGAL STATUS
AN 53039753 INPADOCDB
20070502 EPAK + DESIGNATED CONTRACTING STATES:
EP A3
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
200718..................................................20070505
20070502 EPRIC1 CLASSIFICATION (CORRECTION)
H04L 9/08 20060101AFI20070314BHEP
200718..................................................20070505
Types of search

20070502 EPRIC1 CLASSIFICATION (CORRECTION)
H04Q 7/38 20060101ALI20070328BHEP
200718........................................20070505

3 priorities, 12 applications, 16 publications

=> D FFAMUP.US

If there are no data in this display nothing was updated in the current update week. There will be no charge.

=> D LFAMUP.EP

L13 ANSWER 1 OF 129 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
AN 53039753 INPADOCDB ED 20070426 EW 200717 UP 20070505 UW 200718
PI EP 1777870 A2 20070425

AN 53039753 INPADOCDB ED 20070505 EW 200718 UP 20070505 UW 200718
PI EP 1777870 A3 20070502

LEGAL STATUS CURRENT UPDATE
AN 53039753 INPADOCDB
20070502 EPAK + DESIGNATED CONTRACTING STATES:
EP A3
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
200718........................................20070505

AN 52983185 INPADOCDB ED 20070419 EW 200716 UP 20070419 UW 200717
PI EP 1775876 A2 20070418

LEGAL STATUS CURRENT UPDATE
AN 52983185 INPADOCDB
20070502 EPRIC1 CLASSIFICATION (CORRECTION)
H04L 9/08 20060101ALI20070314BHEP
200718........................................20070505

20070502 EPRIC1 CLASSIFICATION (CORRECTION)
H04Q 7/38 20060101ALI20070328BHEP
200718........................................20070505

In the above example FFAMUP and FFAMED show the same data because this is a new EP publication (European Application) and not an update to an existing publication.

This table shows which information is displayed after a particular update:

<table>
<thead>
<tr>
<th>Family Updates</th>
<th>FFAMUP</th>
<th>FFAMED</th>
<th>LFAMUP</th>
<th>FFAMUP.DE</th>
<th>FFAMUP.EP</th>
<th>LFAMUP.WO</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA1 (new record + LS entry)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>WOA2 (updated)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPB1 (LS update)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US (updated)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WO (LS update)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DE (new record)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

52.9.7 Using the Update fields in special cases

It is possible that a first publication of an invention that is entered in the INPADOCDB/INPAFAMDB databases misses certain details (e.g. IPC codes, patent assignee name). If such documents need to be present in the SDI results do
not use the fields marking the first entry of a patent family, e.g. /EDP, but rather use either /ED (new national publications) or one of the /UP fields (update of bibliographical details, including IPC).

In an SDI on document basis in the INPADOCDB database /ED or /UP should be used as the update field rather than /EDP. As all publications of a family appear in the SDI results in this case the question “ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN?” should be answered YES when the SDI query is created (i.e. elimination of duplicates). (However, the documents are available to the system for this elimination for one year only. If the next publication is issued more than one year later it will show in the SDI results again.)

In an SDI on family basis in INPADOCDB or in an SDI in INPAFAMDB one of the /UP fields should be used rather than /EPF. The “ELIMINATE PREVIOUSLY SEEN ANSWERS...” question (elimination of duplicates) should be answered NO in this case because otherwise later family members will be lost.

Here are a few known problem cases:

- Seven per cent of all WO publications have no IPC codes. The codes will be entered later and the documents concerned are updated. In order not to lose these documents in a document based SDI in the INPADOCDB database the /UP field should be used and the question “ELIMINATE PREVIOUSLY SEEN ANSWERS...” should be answered NO.
  In a family based SDI use one of the UP fields and answer NO to the eliminate duplicates question.

- Some countries publish the fact that an application was made without actually publishing a document. In INPADOCDB these pseudo-documents receive the code D0 (e.g. GB-D0, IL-D0, NO-D0, SE-D0). However, the records do not contain all the data, in particular the IPC is often missing. If such a D0 record is the first record of a patent family the whole patent family, including later publications in other countries, will be lost in a SDI using a combination of IPC and the /EDF or /EDPR field. If /EDP is used any later national publications would be lost.

When monitoring individual documents the /ED field should be used (rather than /EDP).

In a family based SDI in the INPADOCDB database or in the INPAFAMDB database one of the /UP fields should be used rather than /EDF, too.

However, usually these D0 records contain the Patent assignee name. So it is possible to perform a name search on this base:

```
AN 53423387 INPADOCDB ED 20070705 EW 200727 UP 20070705 UW 200727
TI Method for selecting a set of remote user terminals in a data communications network.
TL English
PA KNÖTT, ANDREW M
PAS KNÖTT ANDREW M
DT Patent
PI GB 2007008500 D0 20070606
PIT GB00 PATENT APPLICATION FILED
DAV 20070606 gazette reference
STA PRE-GRANT PUBLICATION
AI GB 2007-8500 A 20070502
AIT GBA Patent application
PRAI GB 2007-8500 A 20070502 (GBA, 20070705)
PRAIT GBA Patent application
FA AI; AN; DAV; DT; ED; EW; PA; PAS; PI; PIT; PRAI; TI
```

- In the publications of US applications often no patent assignee is given or the inventor is entered into the PA field. So if only the patent assignee name is used in an SDI the applications will not be retrieved. This can only be solved by including in the SDI profile the names of known inventors or possibly USCL or IPC codes in addition to the patent assignee name.

On which update fields to use please refer to the paragraph on D0 publications above.

```
AN 53467533 INPADOCDB ED 20070712 EW 200728 UP 20070712 UW 200728
TI Methods, communication networks, and computer program products for mirroring traffic associated with a network element based on whether the network element can be trusted.
TL English
IN AARON JEFFREY; SHRUM EDGAR JR.
INS AARON JEFFREY, US; SHRUM EDGAR JR, US
```
Types of search

- In Japanese publications there is often no patent assignee, no inventor, or no title. Sometimes the data are added later, sometimes they are not. Concerning the update fields the same applies as in the cases described above (D0 publications, patent assignee). Always include the IPC to monitor Japanese publications.

52.9.7.1 DWPI, etc.

The issue of D0 publications does not exist in DWPI or other databases because this type of documents is not entered there. Anyway, the issue of patent assignees not being available in US applications should be considered. The ED field is set when the Application is entered into the database. When the document is updated, e.g. after grant of a patent, and the patent assignee becomes available the ED field remains unchanged. In this case the /UP field should be used rather than the /ED field, answering NO to the question “ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN?” (assuming that you wish to receive all family members).
Search examples
Subject search example

Example 1

What inventions about brakes for in-line skates do exist?

Subject classification using IPC codes

<table>
<thead>
<tr>
<th>A</th>
<th>Section</th>
<th>Section A — HUMAN NECESSITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A63</td>
<td>Class</td>
<td>SPORTS; GAMES; AMUSEMENTS</td>
</tr>
<tr>
<td>A63C</td>
<td>Subclass</td>
<td>SKATES; SKIS; ROLLER SKATES; DESIGN OR LAYOUT OF COURTS, RINKS OR THE LIKE [5]</td>
</tr>
<tr>
<td>A63C 17</td>
<td>Group</td>
<td>Roller skates; Skate-boards [4]</td>
</tr>
<tr>
<td>A63C 17/00</td>
<td>Main Group</td>
<td>Roller skates; Skate-boards [4]</td>
</tr>
<tr>
<td>A63C 17/01</td>
<td>Sub Group</td>
<td>Skate-boards (A63C17/02 to A63C17/28 take precedence) [4]</td>
</tr>
<tr>
<td>A63C 17/02</td>
<td>Sub Group</td>
<td>. with wheels arranged in two pairs</td>
</tr>
<tr>
<td>A63C 17/04</td>
<td>Sub Group</td>
<td>. with wheels arranged otherwise than in two pair</td>
</tr>
<tr>
<td>A63C 17/06</td>
<td>Sub Group</td>
<td>. single-track type</td>
</tr>
<tr>
<td>A63C 17/08</td>
<td>Sub Group</td>
<td>. single-wheel type</td>
</tr>
<tr>
<td>A63C 17/10</td>
<td>Sub Group</td>
<td>. with endless tracks</td>
</tr>
<tr>
<td>A63C 17/12</td>
<td>Sub Group</td>
<td>. with driving mechanisms</td>
</tr>
<tr>
<td>A63C 17/14</td>
<td>Sub Group</td>
<td>. with brakes, e.g. toe stoppers, freewheel roller clutches</td>
</tr>
<tr>
<td>A63C 17/16</td>
<td>Sub Group</td>
<td>. for use on specially shaped or arranged runways</td>
</tr>
<tr>
<td>A63C 17/18</td>
<td>Sub Group</td>
<td>. convertible into ice or snow-running skates</td>
</tr>
</tbody>
</table>

These IPC codes are used for searching:

- A63C 17/04, A63C 17/06 and A63C 17/08 for the ‘in-line skates’ aspect,
- A63C 17/14 for the ‘brakes for roller skates’ aspect.

Keywords

The keywords to be searched in the patent databases can be arranged in these groups:

1. Expressions for skates/roller skates,
2. Expressions for ‘in-line’,
3. Expressions for brakes.

We use the following English words for searching:

1. Skate, Rollerskate, Roller skate, Rollerblade, Roller blade, Roller shoe
2. In-line, Inline, Aligned, Single-row, One-row, Single-track, One-track
3. Brake, Braking, Stop

The English words are partly used in German publications, too. For the German language databases we should additionally use the corresponding German words:

1. Rollschuhe
2. Einspurig, einreihig
3. Brems-, Abbrems-, Anhalt-

The words from groups (1) and (2) will be linked by a proximity operator.

The classification codes will be linked to the text search by AND (see below).

Linking classification and text search

Classification codes were found for all aspects of the search question. As a plain classification search may lead to a large number of hits (in particular in international databases) the search by classification should be linked to the search by keywords. The various combinations of classification codes (IPC) and keywords should be considered, e.g.:

1. IPC (brakes for skates) AND Keywords (in-line skates)
Search examples

2. IPC (in-line skates) AND Keywords (brakes)
3. IPC (brakes for skates) AND IPC (in-line skates)
4. Keywords (in-line skates) AND Keywords (brakes)

At last the individual results are combined by OR to form the overall result.

Combination (3) improves the overall result in particular for documents lacking text fields (e.g. utility models in PATDPA, where there is neither an abstract nor a claim) while combination (4) yields an improved result with incomplete or unfavourable classification.

53.1.4 Search with IPC: DWPI, alternative 1

(Bibliographic file in English, IPC8 with re-classification, using the field IPC for IPC1–8, for IPC1–7 the ICI and ICA fields are included, attributes are not used in this example, range searching, search in the /BI field)

53.1.4.1 Command file for searching with STN Express

(cf. “Monitoring patents” or the STN Express manual)

```c
/* SEARCH "BRAKES FOR INLINE-SKATES" IN THE WPINDEX FILE
=> fil wpindex
*/

/* IPC: ASPECT "INLINE-SKATES"
=> s (a63c0017-04-a63c0017-08)/ipc>_IPCinlsk
*/

/* IPC: ASPECT "BRAKES"
=> s (a63c0017-14)/ipc>_IPCbrake
*/

/* KEYWORDS: ASPECT "INLINE SKATES"
=> s ?skat?>_kw1
   => s ?rollerblad? or ?roller?(1a)?blad?>_kw2
   => s ?roller?(1a)?shoe?>_kw3
   => s kw1\_kw3>_kw4
   => s inline or in-line>_kw5
   => s align##>_sw6
   => s (single or one)(1a)(row# or track#)>_kw7
   => s _kw5\_kw7>_kw8
   => s _kw8\_kw3>_kw4
   => s _kw4\_kw3>_kw5
   => s _kw3\_kw5>_sw6
   => s align##>_sw6
*/

/* KEYWORDS: ASPECT "BRAKES"
=> s ?brake? or ?braking or stop###>_KWbrake
*/

/* LINKING
=> s _IPCinlsk and _KWbrake>_res1
   => s _IPCbrake and _KWbrakewriter>_res2
   => s _KWbrake and _IPCinlsk>_res3
   => s _IPCinlsk and _IPCbrake>_res4
   => s _res1\_res4>_res
*/

53.1.4.2 Search

=> FIL WPINDEX
FILE 'WPINDEX' ENTERED
CCOPYRIGHT (C) 2013 THOMSON REUTERS

IPC: aspect ‘in-line skates’

L1 2540 (A63C0017-04-A63C0017-08)/IPC (3 TERMS)
   (A63C0017-04+NEXT2/IPC)

IPC: aspect ‘brakes’

L2 1425 (A63C0017-14)/IPC

Keywords on the aspect ‘in-line skates’ follow now.

=> $ ?SKAT?
L3 12845 ?SKAT?

=> $ ?ROLLERBLAD? OR ?ROLLER?(1A)?BLAD?
Guide to STN Patent Databases

408

=> $ \text{?ROLLER?(1A)?SHOE?}$
1540068 ?ROLLER?
109174 ?SHOE?
L5 1050 ?ROLLER?(1A)?SHOE?

=> $ \text{L3-L5}$
L6 16456 (L3 OR L4 OR L5)

=> $ \text{INLINE OR IN-LINE}$
6725 INLINE
17050258 IN
1335954 LINE
49846 INLINE (IN/ILINE)
L7 55962 INLINE OR IN-LINE

=> $ \text{ALIGN##}$
L8 297855 ALIGN##

=> $ \text{(SINGLE OR ONE)(1A)(ROW# OR TRACK#)}$
854575 SINGLE
4416782 ONE
199261 ROW#
271775 TRACK#
L9 22541 (SINGLE OR ONE)(1A)(ROW# OR TRACK#)

=> $ \text{L7-L9}$
L10 372196 (L7 OR L8 OR L9)

=> $ \text{L6(3A)L10}$
L11 2542 L6(3A)L10

Next are keywords on the aspect ‘brakes’:

=> $ \text{?BRAKE? OR ?BRAKING OR STOP####}$
220145 ?BRAKE?
103989 ?BRAKING
694306 STOP####
L12 914112 ?BRAKE? OR ?BRAKING OR STOP####

Now the keywords and IPC codes are linked in four combinations, see the introduction to this example.

=> $ \text{L1 AND L12}$
L13 562 L1 AND L12

=> $ \text{L2 AND L11}$
L14 469 L2 AND L11

=> $ \text{L11 AND L12}$
L15 553 L11 AND L12

=> $ \text{L1 AND L2}$
L16 515 L1 AND L2

The overall result is achieved by OR.

=> $ \text{L13-L16}$
L17 1036 (L13 OR L14 OR L15 OR L16)

With 1036 hits the search strategy should be refined. To check the result and to find more aspects to refine the search a few titles are displayed with D SCAN.

=> D SCAN
Search examples

L17  1036  ANSWERS  WPINDEX  COPYRIGHT 2013 THOMSON REUTERS on STN
TI  Detachable in-line skate has sliding module which is slid according to rotation of foot stool in wheel frame, and mode conversion piece enforces hanging of sliding module in walk mode to perform conversion to driving mode from break mode

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): 4

L17  1036  ANSWERS  WPINDEX  COPYRIGHT 2013 THOMSON REUTERS on STN
TI  Composite structure used in e.g. automobiles, comprises overmolding resin composition over portion of the surface having portion made of surface resin composition containing fibrous material impregnated with matrix resin composition

L17  1036  ANSWERS  WPINDEX  COPYRIGHT 2013 THOMSON REUTERS on STN
TI  Ball-slide sport shoes, have chassis provided with back braking block corresponding to position of heel and soles, chassis, slide ball, front braking block and back braking block that are integrally fixed

L17  1036  ANSWERS  WPINDEX  COPYRIGHT 2013 THOMSON REUTERS on STN
TI  Single wheel skate - in which a shoe sole only contains a single roller and a braking rubber block

L17  1036  ANSWERS  WPINDEX  COPYRIGHT 2013 THOMSON REUTERS on STN
TI  Frame for in-line skate, has front portion of heel brake pad provided with gap, where wheel rotary part is provided for right in-line skate over wheel diameter

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): END

To check the titles one should save the answer set with the SAVE command. The search can then be continued later with more specific search terms.

=> SAVE L17 INLWPI/A
ANSWER SET L17 HAS BEEN SAVED AS 'INLWPI/A'

A refinement could for example be the type of brakes:

- Hand-actuated brakes
- Brakes acting on the ground
- Brakes acting on the wheels

However, as the IPC does not offer specific enough classes this requires a keyword search.

53.1.5  Search with IPC: DWPI, alternative 2

(Bibliographic file in English, IPC8 with re-classification, using the field IPC for IPC1–8, for IPC1–7 the ICI and ICA fields are included, attributes are used in this example for invention information, range searching)

53.1.5.1  Command file for searching with STN Express

```bash
=> fil wpindex

\* SEARCH "BRAKES FOR IN-LINE SKATES" IN THE WPINDEX FILE
=> s (a63c0017-04-a63c0017-08)/ipc (S) (I or ICM or ICS)/IPC.KW > _IPCinlsk

\* IPC: ASPECT "IN-LINE SKATES"
=> s (a63c0017-14)/ipc (S) (I OR ICM OR ICS)/IPC. > _IPCbrake

\* KEYWORDS: ASPECT "IN-LINE SKATES"
=> s ?skat? > _kw1
```
Guide to STN Patent Databases

=> s roller? blad? or roller?\{1a\}?blad?\> _kw2
=> s roller?\{1a\}?shoe?\> _kw3
=> s \_kw1\_kw3\> _kw4
=> s inline or in\-line\> _kw5
=> s align##\> _sw6
=> s {single or one}\{1a\}\{row# or track#\}\> _kw7
=> s \_kw5\_kw7\> _kw8
=> s \_kw4\{3a\}_kw8\> _KW

\* KEYWORDS: ASPECT "BRAKES"
=> s brake? or braking or stop####\> _KWbrake

\* LINKING
=> s \_IPC\_brake and _KW\_brake\> _res1
=> s \_IPC\_brake and _KW\_brake\> _res2
=> s \_KW\_brake and _KW\_brake\> _res3
=> s \_IPC\_brake and _IPC\_brake\> _res4
=> s _res1\-res4\> _res

53.1.5.2 Search

=> FILE WPINDEX
FILE 'WPINDEX' ENTERED
COPYRIGHT (C) 2013 THOMSON REUTERS

... 

=> D HIS
FILE 'WPINDEX' ENTERED
L1 2471 S \{A63C0017\-04\-A63C0017\-08\}/IPC (S) (I OR ICM OR ICS)/IPC.KW
L2 1393 S \{A63C0017\-14\}/IPC (S) (I OR ICM OR ICS)/IPC.KW
L3 12845 S ?SKAT?
L4 3211 S ?ROLLERBLAD? OR ?ROLLER\{1A\}?BLAD?
L5 1050 S ?ROLLER\{1A\}?SHOE?
L6 16456 S L3\-L5
L7 55962 S I\LINE\ OR I\-LINE
L8 297855 S ALIGN##
L9 22541 S \{SINGLE OR ONE\}\{1A\}\{ROW# OR TRACK#\}
L10 372196 S L7\-L9
L11 2542 S L6\{3A\}L10
L12 914112 S ?BRAKE? OR ?BRAKING OR STOP####
L13 546 S L1 AND L12
L14 468 S L2 AND L11
L15 553 S L1 AND L12
L16 501 S L1 AND L2
L17 1018 S L13\-L16

This alternative search strategy using attributes yields 18 fewer documents than the first one.
53.1.6 Search with IPC: DWPI, alternative 3

(Bibliographic file in English, IPC8 with re-classification, using the field IPC for IPC1–8, for IPC1–7 this covers the ICI and ICA fields, attributes are not used in this example, range searching, search in Bl field, search is extended to the BIEX field)

53.1.6.1 Search strategy

<table>
<thead>
<tr>
<th>“Brakes” aspect</th>
<th>“Ground contact” aspect</th>
<th>“In-line skates” aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td>brake braking</td>
<td>contacting the ground</td>
<td>skate rollerblade</td>
</tr>
<tr>
<td>stop</td>
<td>groundcontacting</td>
<td>roller blade roller</td>
</tr>
<tr>
<td></td>
<td></td>
<td>shoe inline in line</td>
</tr>
<tr>
<td></td>
<td></td>
<td>single row single track</td>
</tr>
<tr>
<td></td>
<td></td>
<td>one row one track</td>
</tr>
</tbody>
</table>

A63C0017-14 (No IPC code available) A63C0017-04 A63C0017-06 A63C0017-08

53.1.6.2 Command file for searching with STN Express

```c
/* SEARCH "GROUND CONTACTING BRAKES FOR IN-LINE SKATES" IN WPINDEX
=> fil wpindex

/* BRAKES
=> s ?brake? or ?braking or stop###\>_SWbrake
=> s (a63c0017-14)/ipc\>_IPCbrake
=> s _SWbrms or _IPCbrms\>_Brake

/* GROUND CONTACT
=> s contact? (3a) ground or groundcontact?\>_Contact

/* IN-LINE SKATES
=> s ?skat? or ?rollerblade? or ?roller?(1a)?blad? or ?roller?(1a)?shoe?\>_SWskate
=> s inline or in-line or align## or (single or one)(1a)|row# or track#\>_SWinl
=> s _SWskate(3a)_SWinl\_> _SWinlsk
=> s (a63c0017-04-a63c0017-08)/ipc \>_IPCinlsk
=> s _SWinlsk or _IPCinlsk\>_Skate

/* LINKING
=> s _Brake and _Contact and _Skate

53.1.6.3 Search

=> fil wpindex
FILE 'WPINDEX' ENTERED
COPYRIGHT (C) 2013 THOMSON REUTERS

=> D HIS
L1 914112 S ?BRAKE? OR ?BRAKING OR STOP###
L2 1425 S (A63C0017-14)/IPC
L3 914440 S L1 OR L2
L4 19176 S CONTACT? (3A) GROUND?
L5 16456 S ?SKAT? OR ?ROLLERBLAD? OR ?ROLLER?(1A)?BLAD? OR ?ROLLER?(1A)?
L6 372196 S INLNE OR IN-LINE OR ALIGN## OR (SINGLE OR ONE)(1A)|ROW# OR T
L7 2542 S L5(3A)L6
L8 2540 S (A63C0017-04-A63C0017-08)/IPC
L9 4077 S L7 OR L8
L10 56 S L3 AND L4 AND L9
```

411
The new aspect introduces some limitation because the IPC cannot be used for this aspect. The search is extended to the BIEX field:

```
=> SET SFIELDS BI BIEX

=> D HIS
FILE 'WPINDEX' ENTERED
L11  124463 S ?BRAKE? OR ?BRAKING OR STOP####
L12  1393 S (A63C0017-14)/IPC(S) (I OR ICM OR ICS)/IPC.KW
L13  1245203 S L11 OR L12
L14  30477 S CONTACT? (3A) GROUND? OR GROUNDCONTACT?
L15  551938 S IN LINE OR IN-LINE OR ALIGN## OR (SINGLE OR ONE)(1A)(ROW# OR T
L16  2794 S L15(3A)L16
L18  2471 S (A63C0017-04-A63C0017-08)/IPC (S) (I OR ICM OR ICS)/IPC.KW
L19  4196 S L17 OR L18
L20  97 S L13 AND L14 AND L19
L21  42 S L20 NOT L10
```

The search in BIEX yields 42 more documents. When looking at the titles you will find more expressions for the “ground contact” aspect.

```
=> D SCAN
L21  42 ANSWERS WPINDEX COPYRIGHT 2013 THOMSON REUTERS on STN

TI   Ground engaging in-line roller skate brake which is remotely
     activated - has aligned wheels attached to boot, two slidably engaged
     brake members moving between two positions with braking surface above
     and in contact with skating surface

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? [1]: 2
L21  42 ANSWERS WPINDEX COPYRIGHT 2013 THOMSON REUTERS on STN

TI   Brake system for roller skates - has brake pad that is moved to make
     contact with skating surface when tension is applied to actuating line
     through handle

L21  42 ANSWERS WPINDEX COPYRIGHT 2013 THOMSON REUTERS on STN

TI   Roller ski for use on non snow or turf surfaces, has single row of rollers
     supported by bearings at bottom surface center of roller ski board

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? [1]: END
```

53.1.7 Search with IPC: full-text databases PATDPAFULL, EPFULL, PCTFULL

(Full-text databases, IPC8, employing range search, search in the full text (in English and German) and in the TI, AB, CLM fields)

53.1.7.1 Command file for searching with STN Express

```
\* SEARCH 'GROUND CONTACTING BRAKES FOR IN-LINE SKATES'
\* IN PATDPAFULL, EPFULL AND PCTFULL
=> fil patdpafull epfull pctfull

\* BRAKES
=> s (?brake? or ?braking or stop#### or ?abbrems? or ?anhalt?)\> _SWbrake
=> s (a63c0017-14)/ipc \> _IPCbrake
=> s _SWbrake or _IPCbrake > _Brake

\* GROUND CONTACT
=> s (contact? (3a) ground? or groundcontact? or ?bodenkontakt? or boden (3a)
     kontakt?) \> _Contact
```
Search examples

```
* IN-LINE SKATES
=> s (?skat? or ?rollerblad? or ?roller?(1a)?blad? or ?roller?(1a)?shoe? or rollschuh?) => _SWskate
=> s (inline or inline or align# or (single or one)(1a)|row# or track#) or einspur? or einreihe?) => _SWinl
=> s _SWskate (3a)_SWinl or inlineskat? => _SWinlsk
=> s _SWinlsk or _IPCinlsk => _Skate

* LINKING
=> s _Brake and _Contact and _Skate
```

53.1.7.2 Search

```
=> FIL PATDPAFULL EPFULL PCTFULL
...

=> D HIS
FILE 'PATDPAFULL, EPFULL, PCTFULL' ENTERED AT
L1    1198065 S (?BRAKE? OR ?BRAKING OR STOP### OR ?ABBREMS? OR ?ANHALT?)
L2    683 S (A63C0017-14)/IPC
L3    1198360 S L1 OR L2
L4    39374 S (CONTACT? (3A) GROUND? OR GROUNDCONTACT? OR BODENKONTAKT? OR
L5    88279 S (?SKAT? OR ?ROLLERBLAD? OR ?ROLLER?(1A)?BLAD? OR ?ROLLER?(1A)
L6   792831 S (INLINE OR IN-LINE OR ALIN## OR (SINGLE OR ONE)(1A)(ROW# OR
L7   273635 S L5 (3A)L6 OR INLINESKAT?
L8   1378 S (A63C0017-04-A63C0017-08)/IPC
L9   3294 S L7 OR L8
L10  304 S L3 AND L4 AND L9

It may be a good idea to use the TI, AB, CLM fields rather than the Basic Index to obtain fewer, but more relevant documents.
D HIS FULL provides more information on the search history.

=> D HIS FULL
FILE 'PATDPAFULL, EPFULL, PCTFULL'
L1    297543 SEA ABB=ON (?BRAKE? OR ?BRAKING OR STOP### OR ABBREMS? OR ANHALT?)/TI,AB,CLM
L2    683 SEA ABB=ON (A63C0017-14)/IPC
L3    297913 SEA ABB=ON L1 OR L2
L4    9976 SEA ABB=ON (CONTACT? (3A) GROUND? OR GROUNDCONTACT? OR BODENKONTAKT? OR BODEN (3A) KONTAKT?)/TI,AB,CLM
L5    29985 SEA ABB=ON (?SKAT? OR ?ROLLERBLAD? OR ?ROLLER?(1A)?BLAD? OR ?ROLLER?(1A)
L6   227400 SEA ABB=ON (INLINE OR IN-LINE OR ALIN## OR (SINGLE OR ONE)(1A)(ROW# OR TRACK#) OR EINSPUR? OR EINREIH?)/TI,AB,CLM
L7   1546 SEA ABB=ON L5 (3A)L6 OR INLINESKAT?
L8   1378 SEA ABB=ON (A63C0017-04-A63C0017-08)/IPC
L9   2249 SEA ABB=ON L7 OR L8
L10   38 SEA ABB=ON L3 AND L4 AND L9
```

53.1.8 Search with USCL: USPATFULL (Full text database)

Note: As the CPC is used for new documents it is no longer sufficient to search with the USCL only — the CPC should also be used for searching. The USCL is likely to be phased out from c. 2015.

53.1.8.1 Subject classification using USCL codes

```
188/ NCL BRAKES
188002000/R/ NCL VEHICLE
188005000/R/ NCL Ground-engaging
188006000/R/ NCL Sprag
188007000/R/ NCL Anchors
188008000/R/ NCL Sled

280/ NCL LAND VEHICLES
280841000/NCL SKATES
```

413
To compare here is the classification from the year 1999. Please note how much the classification system was refined in the meantime and how the classification system follows the latest developments.

We are going to do a US classification search only. As USPATFULL also has IPC codes (generated with the help of a concordance list) these can of course be used, too (with some disadvantages, see the section on “Search by patent classification”). The search strategy would be basically as in DWPI. When linking keywords (P) proximity should be preferred over the Boolean AND operator. It is even possible to combine a USCL and an IPC search.

The US classification is much more specific regarding our field of search than the IPC, which suggests a much narrower search strategy. As existing documents in the databases are re-classified with every change of the USCL the old classes do not need to be considered and we can just simply enter the current classes. In our example we limit this search to hand-actuated brakes for in-line skates. These are the classes we are going to use for our search:

- 188005000-188008000 for the ‘brakes’ aspect and
- 280011217, 212, 213 for ‘hand-actuated brakes for skates with wheels’
- 280011221, 222, 223, 224, 225, 226, 227, 231, 232, 233 for ‘inline-skates’

The keywords to be searched in the patent databases can be arranged in these groups:

1. Expressions for skates/roller skates,
2. Expressions for ‘in-line’,

414
3. Expressions for hand-actuated brakes.

We use the following English words for searching:

1. Skate, Rollerskate, Roller skate, Rollerblade, Roller blade, Roller shoe
2. In-line, Inline, Aligned, Single-row, One-row, Single-track, One-track
3. Handbrake, wireless brake, contact-less brake

We have to decide whether to search in the Basic Index with the option of left and right truncation (floating stem) or in the /TI, /AB, and /CLM fields only which do not offer left truncation. In this example we are going to use the Basic Index.

When linking the class and keyword searches we are going to consider that these classes are very specific already.

53.1.8.2 Command file for searching with STN Express

```stn
* SEARCH 'BRAKES FOR INLINE-SKATES' IN THE USPATFULL FILE
  => fil uspatfull

* NCL: ASPECT INLINE-SKATES
  => s (280011212 or 280011222 or 280011223 or 280011224 or 280011225 or 280011226 or
  or 280011227 or 280011231 or 280011232 or 280011233)\ncl, incl\> _NClinl

* NCL: ASPECT "HANDBRAKE FOR ROLLER SHOES"
  => s (280011212 or 280011213)\ncl, incl\> _NClhand

* NCL: ASPECT BRAKES
  => s (188005000+nt)\ncl, incl\> _NClbrake

* KEYWORDS: ASPECT INLINE-SKATES
  => s ?skat?\> _KW1
  => s ?roll erskat?\> _KW2
  => s (roller(1a)blad? or roller(1a)blad?)\> _KW3
  => s (roller(1a)shoe# or ?rollershoe?)\> _KW4
  => s _KW1 _KW4\> _KWska te
  => s ([inline or in-line])\> _KW5
  => s align##\> _KW6
  => s ((single or one)(1a)(row# or track#))\> _KW7
  => s _KW5 _KW7\> _KWInl
  => s _KWska te (3a) _KWInl\> _KWln sk

* KEYWORDS: ASPECT HAND BRAKES
  => s (?hand? or ?wireless? or ?contactless?)(2a) brak? or ?handbrak?)\> _KWhand

* LINKING
  => s _NClhand\> _res1
  => s _NClInl and _KWhand\> _res2
  => s _NClbrake and _KWln sk\{p\} _KWhand\> _res3
  => s _KWln sk (p) _KWhand\> _res4
  => s _res1 _res4
```

53.1.8.3 Search

```stn
=> fil uspatfull

Classification codes for the 'in-line skates' aspect.

=> s (280011212 or 280011222 or 280011223 or 280011224 or 280011225 or 280011226 or
280011227 or 280011231 or 280011232 or 280011233)\ncl, incl
L1 833 (280011212 or 280011222 or 280011223 or 280011224 or 280011225 or
280011226 or 280011227 or 280011231 or 280011232 or 280011233
\} \ncl, incl

Classification codes on 'handbrakes for roller skates'.

=> s (280011212 or 280011213)\ncl, incl
L2 65 (280011212 or 280011213)\ncl, incl
```

Classification codes for the 'brakes' aspect.

Search by classification codes for the 'brakes' aspect.
Guide to STN Patent Databases

=> S (188005000)/NCL, INCL
L3 322 (188005000+NT)/NCL, INCL

This is followed by the keyword search for the 'in-line skates' aspect.

=> QUE ?SKAT?
L4 QUE ?SKAT?

=> QUE ?ROLLERSKAT?
L5 QUE ?ROLLERSKAT?

=> QUE (?ROLLERBLAD? OR ROLLER(1A)BLAD?)
L6 QUE (?ROLLERBLAD? OR ROLLER(1A)BLAD?)

=> QUE (ROLLER(1A)SHOE# OR ?ROLLERSHOE?)
L7 QUE (ROLLER(1A)SHOE# OR ?ROLLERSHOE?)

=> QUE L4 - L7
L8 QUE (L4 OR L5 OR L6 OR L7)

=> QUE (INLINE OR I-N-LINE)
L9 QUE (INLINE OR I-N-LINE)

=> QUE ALIGN##
L10 QUE ALIGN##

=> QUE ((SINGLE OR ONE)(1A)(ROW# OR TRACK#))
L11 QUE ((SINGLE OR ONE)(1A)(ROW# OR TRACK#))

=> QUE L9-L11
L12 QUE (L9 OR L10 OR L11)

=> QUE L8 (3A)L12
L13 QUE L8 (3A)L12

Keywords on 'handbrakes'


Linking with (P) proximity is advisable when searching with keywords in the Basic Index of full text databases.

=> S L2
L15 65 (280011212 OR 280011213)/NCL, INCL

=> S L1 AND L14
L16 49 L1 AND L14

=> S L3 AND (L13 (P) L14)
L17 9 L3 AND (L13 (P) L14)

=> S L13 (P) L14
L18 31 L13 (P) L14

=> S L15-L18
L19 95 (L15 OR L16 OR L17 OR L18)

=> D 1-6 TI INCL NCL
L19 ANSWER 1 OF 95 USPATFULL on STN
TI Hand held skating device
INCL INCLM: 280/087.010
INCLS: 280/081.000; 188 5; 280/028.500; 280/011.180
NCL NCLM: 280/087.010
NCLS: 188/005.000; 280/011.180; 280/028.500; 280/841.000

L19 ANSWER 2 OF 95 USPATFULL on STN
TI Recreational and sporting device for movement over ground
INCL INCLM: 280/011.190
NCL NCLM: 280/011.212; 280/011.190
NCLS: 280/011.140; 280/602.000; 280/607.000; 280/DIG.013
53.2 Example 2

This search is on applications of GPS (the Global Positioning System) on golf courses.

53.2.1 Subject classification using Derwent Manual Codes

The codes have to be found in the manual or from documents already known. The thesaurus may then be used on-line and the search be performed using the E numbers created.

Similar to a search by IPC codes or other classification systems the search by Derwent Manual Codes should be complemented by a keyword search as it is difficult to find classification codes for all possible applications. A plain keyword search may not be necessary if the subject field is sufficiently covered by Manual Codes but may be useful to check the result or to find additional codes.

53.2.2 Search in DWPI

**=> FIL WPINDEX**

FILE ‘WPINDEX’ ENTERED
COPYRIGHT (C) 2013 THOMSON REUTERS

**=> SET EXP CONT**
SET COMMAND COMPLETED

**=> E W06-A03+A/ALL/MC**

E1    234489 BT2 W06/MC
      DEF AVIATION, MARINE AND RADAR SYSTEMS
E2    2449 BT1 W06-A/1/MC
      DEF RADAR, NAVIGATION, ETC.
E3    10347 .-> W06-A03/MC
      DEF POSITION FIXING
E4    4573 NT1 W06-A03A/MC
      DEF SATELLITE BASED SYSTEM E.G. GPS
      HNTE (1992- )
E5    507 NT2 W06-A03A1/MC
      DEF NOVEL ASPECTS OF GPS
      HNTE (1997- )
E6    5754 NT2 W06-A03A5/MC
      DEF GPS APPLICATIONS
      HNTE (1997- )
E7    750 NT3 W06-A03A5A/MC
      DEF DIFFERENTIAL GPS
      HNTE (2002- )
E8    16580 NT3 W06-A03A5C/MC
      DEF ABSOLUTE POSITION DETERMINATION
      HNTE (2002- )
Guide to STN Patent Databases

E9 3440 NT3 W06-A03A5E/MC
DEF POSITION DETERMINATION FOR SECONDARY PURPOSE
HNTE (2002- )
E10 609 NT3 W06-A03A5G/MC
DEF USE OF GPS AS A TIME STANDARD
HNTE (2002- )
E11 114 NT3 W06-A03A5J/MC
DEF USE OF GPS AS A FREQUENCY STANDARD
HNTE (2002- )
E12 38 NT3 W06-A03A5M/MC
DEF GPS JAMMING/ANTI-JAMMING
HNTE (2007- )
E13 2114 NT3 W06-A03A5R/MC
DEF NOVEL GPS RECEIVER
HNTE (2002- )
E14 170 NT3 W06-A03A5X/MC
DEF OTHER GPS APPLICATIONS
HNTE (2002- )
E15 1659 NT1 W06-A03B/MC
DEF USING RADIO WAVES
HNTE (2005- )
E16 209 NT1 W06-A03D/MC
DEF USING LIGHT WAVES
HNTE (2005- )
E17 432 NT1 W06-A03F/MC
DEF USING SONIC OR ULTRASONIC WAVE
HNTE (2005- )
********** END **********

Twelve codes are used for the ‘GPS’ aspect.

=> $E3-14$
W06-A03 POSITION FIXING
W06-A03A SATELLITE BASED SYSTEM E.G. GPS
W06-A03A1 NOVEL ASPECTS OF GPS
W06-A03A5 GPS APPLICATIONS
W06-A03A5A DIFFERENTIAL GPS
W06-A03A5C ABSOLUTE POSITION DETERMINATION
W06-A03A5E POSITION DETERMINATION FOR SECONDARY PURPOSE
W06-A03A5G USE OF GPS AS A TIME STANDARD
W06-A03A5J USE OF GPS AS A FREQUENCY STANDARD
W06-A03A5M GPS JAMMING/ANTI-JAMMING
W06-A03A5R NOVEL GPS RECEIVER
W06-A03A5X OTHER GPS APPLICATIONS
10347 W06-A03/MC
4573 W06-A03A/MC
507 W06-A03A1/MC
5754 W06-A03A5/MC
750 W06-A03A5A/MC
16580 W06-A03A5C/MC
3440 W06-A03A5E/MC
509 W06-A03A5G/MC
114 W06-A03A5J/MC
38 W06-A03A5M/MC
2114 W06-A03A5R/MC
170 W06-A03A5X/MC
L1 43401 W06-A03/MC OR W06-A03A/MC OR W06-A03A1/MC OR W06-A03A5/MC OR W06-A03A5A/MC OR W06-A03A5C/MC OR W06-A03A5E/MC OR W06-A03A5G/MC OR W06-A03A5J/MC OR W06-A03A5X/MC OR W06-A03A5/MC OR W06-A03A5/MC OR W06-A03A5/MC OR W06-A03A5/MC OR W06-A03A5/MC OR W06-A03A5/MC OR W06-A03A5/MC

Next are codes on the set-up of sports grounds, such as golf courses.

=> $E W04-X01+ALL/MC$
E18 883865 BT2 W04/MC
DEF AUDIO/VISUAL RECORDING AND SYSTEMS
E19 1799 BT1 W04-X/MC
DEF SPORTS, GAMES, TOYS
E20 6276 - - > W04-X01/MC
DEF SPORTS AND LEISURE
HNTE (1983- )
Search examples

E21  4599  NT1  W04-X01A/MC
DEF  TRAINING EQUIPMENT
HNTE (1983- )

E22  3147  NT2  W04-X01A2/MC
DEF  PERFORMANCE MONITORS
HNTE (1992- )

E23  1257  NT2  W04-X01A3/MC
DEF  SIMULATORS
HNTE (1992- )

E24  4889  NT2  W04-X01A5/MC
DEF  FITNESS TRAINING EQUIPMENT
HNTE (1992- )

E25  61   NT3  W04-X01A5A/MC
DEF  EXERCISE BICYCLE
HNTE (2011- )

E26  297   NT3  W04-X01A5C/MC
DEF  EXERCISE TREADMILL
HNTE (2011- )

E27  637   NT2  W04-X01A9/MC
DEF  OTHER SPORTS TRAINING EQUIPMENT
HNTE (1992- )

E28  534   NT1  W04-X01C/MC
DEF  COUNTING, TIMING, MEASURING, SCORING
HNTE (1992- )

E29  1313  NT2  W04-X01C1/MC
DEF  COUNTING, TIMING, MEASURING, SCORING, DETECTION
HNTE (1992- )

E30  49   NT3  W04-X01C1A/MC
DEF  COUNTING, TIMING, MEASURING
HNTE (2011- )

E31  14   NT3  W04-X01C1C/MC
DEF  DETECTION OF SCORING OR FAULT CONDITION
HNTE (2011- )

E32  775   NT2  W04-X01C3/MC
DEF  SCORING, SCORE DISPLAY
HNTE (1992- )

E33  763   NT1  W04-X01D/MC
DEF  LOCATORS AND GUIDING SYSTEMS
HNTE (1992- )

E34  5362  NT1  W04-X01E/MC
DEF  SPORTS EQUIPMENT PER SE
HNTE (1992- )

E35  2989  NT1  W04-X01F/MC
DEF  SPORTS GROUNDS, STADIUMS, COURSES, INSTALLATIONS
HNTE (1992- )

E36  701   NT1  W04-X01H/MC
DEF  WARNING SYSTEMS, ALARMS, PROTECTION
HNTE (1992- )

E37  0    NT1  W04-X01K/MC
DEF  TYPE OF SPORT OR LEISURE ACTIVITY
HNTE (2011- )

E38  535   NT2  W04-X01K1/MC
DEF  SPORTS USING BALL, PUCK, OR SHUTTLECOCK
HNTE (2011- )

E39  311   NT3  W04-X01K1A/MC
DEF  BASEBALL
HNTE (2011- )

E44  1376  NT3  W04-X01K1L/MC
DEF  GOLF
HNTE (2011- )

E76  1322  NT1  W04-X01X/MC
DEF  SPORTS - OTHER
HNTE (1992- )
The codes relevant for golf courses are chosen and included in the search.

=> $E28\text{-}E36,E44$

W04\text{-}X01C COUTI NG, TI MI NG, MEASURI NG, SCORI NG
W04\text{-}X01C1 COUTI NG, TI MI NG, MEASURI NG, SCORI NG, DETECTION
W04\text{-}X01C1A COUTI NG, TI MI NG, MEASURI NG
W04\text{-}X01C1C DETECTION OF SCORI NG OR FAULT CONDITION
W04\text{-}X01C3 SCORI NG, SCORE DISPLAY
W04\text{-}X01D LOCATORS AND GUIDING SYSTEMS
W04\text{-}X01E SPORTS EQUIPMENT PER SE
W04\text{-}X01F SPORTS GROUNDS, STADI A, COURSES, INSTALLATIONS
W04\text{-}X01H WARNING SYSTEMS, ALARMS, PROTECTION
W04\text{-}X01K1L GOLF

534 W04\text{-}X01C/MC
1313 W04\text{-}X01C1/MC
49 W04\text{-}X01C1A/MC
14 W04\text{-}X01C1C/MC
775 W04\text{-}X01C1A/MC
763 W04\text{-}X01C1C/MC
5362 W04\text{-}X01E/MC
2989 W04\text{-}X01F/MC
701 W04\text{-}X01H/MC
1376 W04\text{-}X01K1L/MC

L2 12610 (W04\text{-}X01C/MC OR W04\text{-}X01C1/MC OR W04\text{-}X01C1A/MC OR W04\text{-}X01C1C/MC OR W04\text{-}X01C3/MC OR W04\text{-}X01D/MC OR W04\text{-}X01E/MC OR W04\text{-}X01F/MC OR W04\text{-}X01H/MC OR W04\text{-}X01K1L/MC)

=> $GOLF$

L3 54433 GOLF?/BI, BIEX

The abbreviation ‘GPS’ having a different use in the CPI (Chemical Patents Index) segment of DWPI this segment is excluded from the search.

=> $\text{(GPS OR GLOBAL POSITIONING SYSTEM#)}$ NOT CPI/FS

134934 GPS
158205 GPS
37952 GLOBAL
223203 POSITIONING
2807431 SYSTEM#
12516 GLOBAL POSITIONING SYSTEM# (GLOBAL(W) POSITIONING(W) SYSTEM#)
6167750 CPI/FS

L4 64838 (GPS/BI, BIEX OR GLOBAL POSITIONING SYSTEM#/BI, BIEX) NOT CPI/FS

Next are four combinations of classification and keywords.

This is the combination of the Manual Codes for the various aspects.

=> $L1 \text{ AND } L2$

L5 320 L1 AND L2

As it is difficult to find appropriate classification codes for all applications it is a good idea to use combinations with keywords.

=> $L1 \text{ AND } L3$

L6 307 L1 AND L3

=> $L2 \text{ AND } L4$

L7 404 L2 AND L4

And this is a plain keyword search.

=> $L3 \text{ AND } L4$

L8 485 L3 AND L4

=> $L5\text{-}L8$

L9 749 (L5 OR L6 OR L7 OR L8)
Search examples

To check some documents are displayed with D SCAN.

=> D L9 SCAN

L9 749 ANSWERS WP INDEX COPYRIGHT 2013 THOMSON REUTERS on STN

TI Golf ball locator for use by golfer at golf club, has processor controlling radar transceiver and display, calculating position of golf ball and providing display to inform user about position of golf ball

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): 5

L9 749 ANSWERS WP INDEX COPYRIGHT 2013 THOMSON REUTERS on STN

TI Golf cart with automatic track guidance

L9 749 ANSWERS WP INDEX COPYRIGHT 2013 THOMSON REUTERS on STN

TI Golf assistant terminal has arithmetic processing unit that processes required data for play and indicator that displays drop point based on result of arithmetic processing unit

L9 749 ANSWERS WP INDEX COPYRIGHT 2013 THOMSON REUTERS on STN

TI Golf tournament information providing system for golf tournament hall, has information input portable terminal transmitting geographical positional information of golf ball and tournament basic information to management server

L9 749 ANSWERS WP INDEX COPYRIGHT 2013 THOMSON REUTERS on STN

TI Measurement structure of distance in golf course uses portable measurement display device in displaying distance of green, and distance of cart to green in (liquid crystal display) LCD

L9 749 ANSWERS WP INDEX COPYRIGHT 2013 THOMSON REUTERS on STN

TI Golf ball location system for use on golf course has display screen showing plan views or three-dimensional displays of golf course and using GPS navigation system

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): END

If the classification codes were good enough only few additional documents should be found in the plain keyword search—in this case there are 40 documents that were found exclusively by the keyword search.

=> S L9 NOT L5-7
L10 136 L9 NOT (L5 OR L6 OR L7)

=> SEL 1- MC
E77 THROUGH E382 ASSIGNED

The group T01J? (data processing systems) would probably be a good candidate to complement the search results.

=> D SEL E77-
E77 21 W01-C01D3C/MC
E78 15 T01-J30D/MC
E79 10 T01-J21A/MC
E80 10 T01-S03/MC
E81 9 T01-N02A3C/MC
E82 8 S02-B08C/MC
E83 8 T01-J/MC
E84 8 T01-J05B4P/MC
E85 8 W01-B05A1A/MC
E86 7 T01-J07D1/MC
...
54 Example for subject classification on-line (IPC)

54.1 Hierarchical search

Hierarchical search with the 2-point subgroup, G03F 7/027. All relevant subgroups should be included in the search.

Excerpt from the hierarchy of the IPC class, G03 – Photography

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G03F 7/027</td>
<td>Non-macromolecular photopolymerisable compounds having carbon-to-carbon double bonds</td>
</tr>
<tr>
<td>G03F 7/028</td>
<td>with photosensitivity-increasing substances</td>
</tr>
<tr>
<td>G03F 7/029</td>
<td>Inorganic compounds; Onium compounds;</td>
</tr>
<tr>
<td>G03F 7/031</td>
<td>Organic compounds not covered by group G03F 7/029</td>
</tr>
<tr>
<td>G03F 7/032</td>
<td>with binders</td>
</tr>
<tr>
<td>G03F 7/033</td>
<td>the binders being polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds</td>
</tr>
<tr>
<td>G03F 7/035</td>
<td>the binders being polyurethanes</td>
</tr>
<tr>
<td>G03F 7/037</td>
<td>the binders being polyamides or polylamides</td>
</tr>
</tbody>
</table>

=> FIL HCAPLUS

1. EXPAND with the IPC code shows whether this code is in the IPC thesaurus. The AT column refers to the IPC thesaurus.

=> E G03F0007-027/IPC 5

<table>
<thead>
<tr>
<th>E#</th>
<th>FREQUENCY</th>
<th>AI</th>
<th>TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>3</td>
<td></td>
<td>G03F0007-026/IPC</td>
</tr>
<tr>
<td>E2</td>
<td>1</td>
<td></td>
<td>G03F0007-0269/IPC</td>
</tr>
<tr>
<td>E3</td>
<td>9985</td>
<td>4</td>
<td>G03F0007-027/IPC</td>
</tr>
<tr>
<td>E4</td>
<td>4136</td>
<td>4</td>
<td>G03F0007-028/IPC</td>
</tr>
<tr>
<td>E5</td>
<td>2974</td>
<td>2</td>
<td>G03F0007-029/IPC</td>
</tr>
</tbody>
</table>

=> E G03F0007-027+NT/IPC

2. Use the +NT relationship code to display all ‘Narrower Terms’.

<table>
<thead>
<tr>
<th>E6</th>
<th>9985</th>
<th>4</th>
<th>G03F0007-027/IPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>E7</td>
<td>4136</td>
<td>NT1</td>
<td>Non-macromolecular photopolymerisable compounds having carbon-to-carbon double bonds, e.g. ethylenic compounds (G03F0007-075 takes precedence)</td>
</tr>
<tr>
<td>E8</td>
<td>2974</td>
<td>NT2</td>
<td>with photosensitivity-increasing substances, e.g. photoinitiators</td>
</tr>
<tr>
<td>E9</td>
<td>3195</td>
<td>NT2</td>
<td>Inorganic compounds; Onium compounds; Organic compounds having hetero atoms other than oxygen, nitrogen or sulfur</td>
</tr>
<tr>
<td>E10</td>
<td>3012</td>
<td>NT1</td>
<td>Organic compounds not covered by group G03F0007-029</td>
</tr>
<tr>
<td>E11</td>
<td>4208</td>
<td>NT2</td>
<td>with binders</td>
</tr>
<tr>
<td>E12</td>
<td>487</td>
<td>NT2</td>
<td>the binders being polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds, e.g. vinyl polymers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the binders being polyurethanes</td>
</tr>
</tbody>
</table>

=> E G03F0007-031/IPC

=> G03F0007-032/IPC

=> G03F0007-033/IPC

=> G03F0007-035/IPC
Search examples

**VALID FROM 19900101 TO PRESENT ( IPC EDITION: 5.8 )**

3. Use the +NT relationship code to search the IPC code and all ‘Narrower Terms’.

=> S G03F 0007-027 +NT/IPC
L1 18761 G03F 0007-027 +NT/IPC (8 TERMS)

### 54.2 Range search

Searching all IPC codes from B60R 21/23 to B60R 21/239.

<table>
<thead>
<tr>
<th>Excerpt from the hierarchy of IPC class, B60R 21 – Airbags</th>
</tr>
</thead>
<tbody>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
<tr>
<td>B60R 21/23</td>
</tr>
</tbody>
</table>

=> FIL INPADOCDB

=> S B60R0021-23..B60R0021-239/IPC
L1 14744 B60R0021-23..B60R0021-239/IPC (11 TERMS)
   (B60R0021-23+NEXT10/IPC)

Extension of the search to the code B60R0021-24.

=> S (B60R0021-23..B60R0021-239 OR B60R0021-24)/IPC
14744 B60R0021-23..B60R0021-239/IPC (11 TERMS)
   (B60R0021-23+NEXT10/IPC)
773 B60R0021-24/IPC
L2 14809 (B60R0021-23..B60R0021-239 OR B60R0021-24)/IPC

=> S L2 NOT L1
L3 65 L2 NOT L1

A small number of documents have not been re-classified.
Until re-classification is complete also use the old (now invalid) IPC codes. Even with re-classification you can still get hits with dropped codes.

=> D PI IPC.TAB

L3 ANSWER 1 OF 65 INPADOCDB COPYRIGHT 2013 EPO/FIZ KA on STN
PI JP 3052832U U 19981009

<table>
<thead>
<tr>
<th>IPC CODE</th>
<th>VERSION</th>
<th>POS</th>
<th>INV LEVEL</th>
<th>CC ASSIGNMENT</th>
<th>DATE</th>
<th>STAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>..........</td>
<td>..........</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICM B60R0021-24</td>
<td>(6)</td>
<td>&lt;---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# 54.3 Identifying relevant IPC classes (Chemical Abstracts)

Identifying relevant IPC classes for the chemical treatment of wood.

```plaintext
=> FIL ZCAPLUS

1. EXPAND with keyword in the IPC field.

=> E WOOD/IPC

<table>
<thead>
<tr>
<th>E#</th>
<th>FILE</th>
<th>FREQUENCY</th>
<th>AT</th>
<th>TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>ZCAPLUS</td>
<td>0</td>
<td>1</td>
<td>WOGGLES/IPC</td>
</tr>
<tr>
<td>E2</td>
<td>ZCAPLUS</td>
<td>0</td>
<td>1</td>
<td>WOLFRAM/IPC</td>
</tr>
<tr>
<td>E3</td>
<td>ZCAPLUS</td>
<td>0</td>
<td>1</td>
<td>... &gt; WOOD/IPC</td>
</tr>
<tr>
<td>E4</td>
<td>ZCAPLUS</td>
<td>0</td>
<td>1</td>
<td>WOOD * ABRASIVE GRINDING OR POLISHING OF WOOD/IPC</td>
</tr>
<tr>
<td>E5</td>
<td>ZCAPLUS</td>
<td>0</td>
<td>1</td>
<td>WOOD * ARTIFICIAL WOOD/IPC</td>
</tr>
<tr>
<td>E6</td>
<td>ZCAPLUS</td>
<td>0</td>
<td>1</td>
<td>WOOD * CHEMICAL OR PHYSICAL TREATMENT OF WOOD/IPC</td>
</tr>
<tr>
<td>E7</td>
<td>ZCAPLUS</td>
<td>0</td>
<td>1</td>
<td>WOOD * CHIPBOARD/IPC</td>
</tr>
</tbody>
</table>

2. EXPAND with relevant keywords and +KT relationship code displays relevant IPC codes.

=> E E6+KT

<table>
<thead>
<tr>
<th>E#</th>
<th>FILE</th>
<th>FREQUENCY</th>
<th>TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>ZCAPLUS</td>
<td>0</td>
<td>... &gt; WOOD * CHEMICAL OR PHYSICAL TREATMENT OF WOOD/IPC</td>
</tr>
<tr>
<td>E2</td>
<td>ZCAPLUS</td>
<td>9583</td>
<td>KT B27K/IPC</td>
</tr>
</tbody>
</table>

3. EXPAND with the relevant IPC code and +ED relationship code displays the title of the IPC code.

=> E B27K+ED/IPC

| E1 | ZCAPLUS   | 9583      | B27K/IPC PROCESSES, APPARATUS OR SELECTION OF SUBSTANCES FOR IMPREGNATING, STAINING, DYEING, BLEACHING OF WOOD OR SIMILAR MATERIALS, OR TREATING OF WOOD OR SIMILAR MATERIALS WITH PERMEANT LIQUIDS, NOT OTHERWISE PROVIDED FOR (APPLYING LIQUIDS OR OTHER FLUENT MATERIALS TO SURFACES IN GENERAL B05; COATING WOOD OR SIMILAR MATERIAL B44D); CHEMICAL OR PHYSICAL TREATMENT OF CORK, CANE, REED, STRAW OR SIMILAR MATERIALS |
```

# 54.4 Identifying relevant IPC classes (INPADOCDB)

Identifying relevant IPC classes for the chemical treatment of wood.

```plaintext
=> FIL INPADOCDB

1. EXPAND with keyword in the IPC field.

=> E WOOD/IPC

<table>
<thead>
<tr>
<th>E#</th>
<th>FILE</th>
<th>FREQUENCY</th>
<th>AT</th>
<th>TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>INPADOCDB</td>
<td>0</td>
<td>1</td>
<td>WOGGLES/IPC</td>
</tr>
<tr>
<td>E2</td>
<td>INPADOCDB</td>
<td>0</td>
<td>1</td>
<td>WOLFRAM/IPC</td>
</tr>
<tr>
<td>E3</td>
<td>INPADOCDB</td>
<td>0</td>
<td>1</td>
<td>... &gt; WOOD/IPC</td>
</tr>
<tr>
<td>E4</td>
<td>INPADOCDB</td>
<td>0</td>
<td>1</td>
<td>WOOD * ABRASIVE GRINDING OR POLISHING OF WOOD/IPC</td>
</tr>
<tr>
<td>E5</td>
<td>INPADOCDB</td>
<td>0</td>
<td>1</td>
<td>WOOD * ARTIFICIAL WOOD/IPC</td>
</tr>
<tr>
<td>E6</td>
<td>INPADOCDB</td>
<td>0</td>
<td>1</td>
<td>WOOD * CHEMICAL OR PHYSICAL TREATMENT OF WOOD/IPC</td>
</tr>
<tr>
<td>E7</td>
<td>INPADOCDB</td>
<td>0</td>
<td>1</td>
<td>WOOD * CHIPBOARD/IPC</td>
</tr>
<tr>
<td>E8</td>
<td>INPADOCDB</td>
<td>0</td>
<td>1</td>
<td>WOOD * CUTTING SCREW THREADS ON WOOD/IPC</td>
</tr>
</tbody>
</table>
```
Search examples

2. EXPAND with relevant keywords and +KT relationship code displays relevant IPC codes.

<table>
<thead>
<tr>
<th>E#</th>
<th>FILE</th>
<th>FREQUENCY</th>
<th>TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>INPADOCDB</td>
<td>0</td>
<td>WOOD * chemical or physical treatment of WOOD/IPC</td>
</tr>
<tr>
<td>E2</td>
<td>INPADOCDB</td>
<td>27120 KT</td>
<td>B27K/IPC</td>
</tr>
</tbody>
</table>

3. EXPAND with the relevant IPC code and +ED relationship code displays the title of the IPC code.

<table>
<thead>
<tr>
<th>E#</th>
<th>FILE</th>
<th>FREQUENCY</th>
<th>TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>INPADOCDB</td>
<td>27120</td>
<td>B27K/IPC PROCESSES, APPARATUS OR SELECTION OF SUBSTANCES FOR IMPREGNATING, STAINING, DYEING, BLEACHING OF WOOD OR SIMILAR MATERIALS, OR TREATING OF WOOD OR SIMILAR MATERIALS WITH PERMEANT LIQUIDS, NOT OTHERWISE PROVIDED FOR (applying liquids or other fluent materials to surfaces in general B05; coating wood or similar material B44D); CHEMICAL OR PHYSICAL TREATMENT OF CORK, CANE, REED, STRAW OR SIMILAR MATERIALS</td>
</tr>
</tbody>
</table>

********** END **********
55 Example for subject classification on-line (USPC)

55.1 Search question

We are looking for US Classification codes on the spectrum analysis of signals.
(This strategy is the same as explained in section “Search by patent classification”.)

55.2 Search in IFIREF (1st part of search)

=> FIL IFIREF
   IL E 'I FI REF' ENTERED
COPYRIGHT (C) 2007 IFI CLAIMS(R) Patent Services (IFI)

Searching the keywords in the controlled vocabulary.

=> S (SPECTRUM AND ANALYSIS)/CW
   21 SPECTRUM/CW
   199 ANALYSIS/CW
L1
   9 (SPECTRUM AND ANALYSIS)/CW

Linking with Class/FS to exclude Uniterms.

=> S L1 AND CLASS/FS
   162352 CLASS/FS
L2
   8 L1 AND CLASS/FS

SELECT-ing the keyword field.

=> SEL 1 - CT
   E1 THROUGH E6 ASSIGNED

=> D SEL
   E1
   3 SPECTRUM ANALYSIS/CT
   E2
   1 BY SPECTRUM STORAGE AND ANALYSIS/CT
   E3
   1 FREQUENCY SPECTRUM ANALYZER/CT
   E4
   1 REAL-TIME SPECTRUM ANALYZER/CT
   E5
   1 SPECTRUM ANALYSIS (COMPOSITION) (364/498)/CT
   E6
   1 SPECTRUM ANALYSIS (E.G., FLAME PHOTOMETRY, ETC.)/CT

Search for the relevant entries. Again the Unterms are excluded.

=> S E1 - E4 AND CLASS/FS
   SPECTRUM ANALYSIS 05192
   4 "SPECTRUM ANALYSIS"/CT
   1 "BY SPECTRUM STORAGE AND ANALYSIS"/CT
   1 "FREQUENCY SPECTRUM ANALYZER"/CT
   1 "REAL-TIME SPECTRUM ANALYZER"/CT
   162352 CLASS/FS
L3
   6 ("SPECTRUM ANALYSIS"/CT OR "BY SPECTRUM STORAGE AND ANALYSIS"/CT
   OR "FREQUENCY SPECTRUM ANALYZER"/CT OR "REAL-TIME SPECTRUM
   ANALYZER"/CT) AND CLASS/FS

=> DEL SEL Y

SELECT-ing the USCL codes we have retrieved.

=> SEL 1 - 6 NCL
   E1 THROUGH E6 ASSIGNED

=> D SEL
   E1
   1 073659000/NCL
   E2
   1 250390070/NCL
   E3
   1 324076190/NCL
   E4
   1 324076220/NCL
   E5
   1 324312000/NCL
   E6
   1 342192000/NCL

In USPATFULL it is sometimes difficult to find the appropriate entries in the thesaurus because only keywords can be searched. In IFIREF it is possible to search the controlled vocabulary and the full text of the classification.
55.3 Search in USPATFULL (Alternative 1st part of search)

== FIL USPATFULL
ILE 'USPATFULL' ENTERED
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

No result. Actually, this query is made up wrong as there is only a phrase index.

== S (SPECTRUM AND ANALYSIS)/NCL
L4
0 SPECTRUM/ NCL
0 ANALYSIS/ NCL

But there is no result with the phrase either. We should rather use EXPAND.

== S SPECTRUM ANALYSIS/NCL
L5
0 SPECTRUM ANALYSIS/ NCL

Set continuous EXPAND numbers. This setting prevents the EXPAND from starting from E1 every time. This is more useful for the following search.

== SET EXPAND CONT
SET COMMAND COMPLETED

== E SPECTRUM/NCL
E#   FREQUENCY    AT     TERM
...          ...   ...
E7           0     1     SPECTROPHOTOMETER * X RAY/NCL
E8           0     1     SPECTROSCOPE/NCL

Not a good place to look.

E9           0     1     SPECTRUM/ NCL
E10          0     1     SPECTRUM (SEE SPECTROMETER)/ NCL
E11          0     1     SPECULA/ NCL
E12          0     1     SPECULA * DESIGNED/ NCL
E13          0     1     SPEECH/ NCL
E14          0     1     SPEECH (SEE SOUND)/ NCL
E15          0     1     SPEECH * AMPLIFIER/ NCL
E16          0     1     SPEECH * CONTROLLED/ NCL
E17          0     1     SPEECH * CONTROLLED * IN TYPEWRITER/ NCL
E18          0     1     SPEECH * EXHIBITING BY VISUAL MEANS/ NCL

== E ANALYSIS/NCL
E#   FREQUENCY    AT     TERM
...          ...   ...
E19          0     1     ANALOGUE COMPUTER/ NCL
E20          0     1     ANALOGUE COMPUTER * ELECTROLYTIC TANK FOR DETERMINING EQUIPMENTAL LINES/ NCL
E21          0     1     ANALYSIS/ NCL

This looks much better.

E22          0     1     ANALYSIS OF COMPLEX WAVES/ NCL
E23          0     1     ANALYTICAL AND ANALYTICAL CONTROL/ NCL
E24          0     1     ANALYTICAL AND ANALYTICAL CONTROL * APPARATUS/ NCL
E25          0     1     ANALYTICAL AND ANALYTICAL CONTROL * APPARATUS * CHEMICAL/ NCL
E26          0     1     ANALYTICAL AND ANALYTICAL CONTROL * APPARATUS * ELECTROLYTIC/ NCL
E27          0     1     ANALYTICAL AND ANALYTICAL CONTROL * APPARATUS * FERMENTATION/ NCL
E28          0     1     ANALYTICAL AND ANALYTICAL CONTROL * COMPOSITIONS/ NCL
E29          0     1     ANALYTICAL AND ANALYTICAL CONTROL * ELECTRON MICROSCOPE/ NCL

The +KT operator shows the corresponding US classes.

== E E22+KT
E31          0     1     ANALYSIS OF COMPLEX WAVES/ NCL
E32          211     KT 324076120/ NCL
********     END ********
The +ALL operator shows the full definition plus broader and narrower classes.

E32 +ALL

E33 52125 BT2 324 NCL
ELECTRICITY: MEASURING AND TESTING
E34 276 BT1 324076110/NCL
MEASURING, TESTING, OR SENSING ELECTRICITY, PER SE
E35 211 -> 324076120/NCL
..Analysis of complex waves
E36 115 NT1 324076130/NCL
..Amplitude distribution
E37 58 NT2 324076140/NCL
..Radiometer (e.g., microwave, etc.)
E38 130 NT2 324076150/NCL
...With sampler
E39 55 NT2 324076160/NCL
...With counter
E40 49 NT2 324076170/NCL
...With integrator
E41 16 NT2 324076180/NCL
...With slope detector
E42 to E44 are the same classes as those we found in IFIRE.
E42 286 NT1 324076190/NCL
..Frequency spectrum analyzer
E43 161 NT2 324076210/NCL
...By Fourier analysis
E44 87 NT2 324076220/NCL
...Real-time spectrum analyzer
E45 132 NT2 324076230/NCL
...With mixer
E46 167 NT2 324076240/NCL
...With sampler

55.4 Continued search in USPATFULL (2nd part of search)

In IFIRE the records are not very clear. Therefore, and because there is a thesaurus available for the US classification in this database, we continue in the USPATFULL file.

=> F I L USPAT
FILE 'USPATFULL' ENTERED
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

We would like continuous EXPAND numbers.

=> S E T E XP C O N T
SET COMMAND COMPLETED

=> D S E L E1-E6
E1 1 073659000/NCL
E2 1 250390070/NCL
E3 1 324076190/NCL
E4 1 324076220/NCL
E5 1 324312000/NCL
E6 1 342192000/NCL

EXPAND on the classes that we found using the thesaurus. The +ALL operator shows the definition plus broader and narrower classes.

=> E E1+ALL
E61 75610 BT4 073 NCL
MEASURING AND TESTING
E62 127 BT3 073570000/NCL
VIBRATION
E63 208 BT2 073649000/NCL
..Sensing apparatus
E64 113 BT1 073658000/NCL
..With electrically controlled indicator
E65 159 -> 073659000/NCL
Search examples

********** END **********

=> E E2+ALL
E66 68685 BT3 250/NCL RADIANT ENERGY
E67 499 BT2 250336100/NCL INVISIBLE RADIANT ENERGY RESPONSIVE ELECTRIC SIGNALLING
E68 245 BT1 250390010/NCL Neutron responsive means
E69 40 E66 250390080/NCL Spectrum analysis
E70 10 NT1 250390080/NCL Using time-of-flight spectrometers
E71 17 NT1 250390090/NCL Using diffractometers
********** END **********

We remember those classes which are interesting for our further search.

=> E E3+ALL
E72 52125 BT3 324/NCL ELECTRICITY: MEASURING AND TESTING
E73 276 BT2 324076110/NCL MEASURING, TESTING, OR SENSING ELECTRICITY, PER SE
E74 211 BT1 324076120/NCL Analysis of complex waves
E75 286 E73 324076190/NCL Frequency spectrum analyzer
E76 161 NT1 324076210/NCL By Fourier analysis
E77 87 NT1 324076220/NCL Real-time spectrum analyzer
E78 132 NT1 324076230/NCL With mixer
E79 167 NT1 324076240/NCL With sampler
E80 19 NT1 324076250/NCL With slope detector
E81 63 NT1 324076260/NCL Scanning panoramic receiver
E82 58 NT2 324076270/NCL With particular sweep circuit
E83 88 NT1 324077110/NCL Nonscanning
E84 51 NT2 324076280/NCL Digital filter
E85 128 NT2 324076290/NCL With filtering
E86 82 NT3 324076310/NCL Parallel filters
E87 0 NT4 324076320/NCL With space discharge device
E88 112 NT2 324076330/NCL Correlation
E89 2 NT3 324076340/NCL With space discharge device
E90 109 NT2 324076350/NCL With delay line
E91 95 NT2 324076360/NCL With optics
E92 30 NT3 324076370/NCL Bragg cell
********** END **********

This step needs to be repeated for all classes found.

=> E E4+ALL
...

=> E E5+ALL
Guide to STN Patent Databases

SEARCH by one of the classes with a thesaurus operator.

=> E6+ALL

55.5 Search in IFIPAT

We now want to use the US classes to search the IFIPAT file. In IFIPAT there is no classification thesaurus.

FILE 'IFIPAT' ENTERED
COPYRIGHT (C) 2007 IFI CLAIMS Patent Services (IFI)

This search yields an error message.

RELATIONSHIP 'NT' IGNORED
RELATIONSHIPS DO NOT EXIST FOR FIELD 'NCL'

Using the L-number from USPATFULL does not do what we want either.

The only option is to use all the E numbers for searching.
56 Search by subject index example

56.1 Example 1

We are looking for materials that can be used for Antireflection coatings on optical lenses.

56.1.1 Search in HCAPLUS

=> FIL HCAPLUS
FILE 'HCAPLUS' ENTERED
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Search field /CT: Controlled Terms;
additional explanations in /IT; use (L) proximity.

=> S OPTICAL MATERIALS/CT(L)(LENS?(L)COAT?(L)ANTIREFLECT?)/IT
  16026 OPTICAL MATERIALS/CT
  33938 LENS?/IT
  662912 COAT?/IT
  10574 ANTIREFLECT?/IT
L1  30 OPTICAL MATERIALS/CT(L)(LENS?(L)COAT?(L)ANTIREFLECT?)/IT
Searching additional indexing terms.

=> S LENSES/CT(L)(COAT?(L)ANTIREFLECT?)/IT
  14949 LENSES/CT
  662912 COAT?/IT
  10574 ANTIREFLECT?/IT
L2  182 LENSES/CT(L)(COAT?(L)ANTIREFLECT?)/IT
Both results complement each other.

=> S L1-2
L3  193 (L1 OR L2)
The retrieved answer set is limited to patent publications.

=> S L3 AND P/DT
  4400994 P/DT
L4  175 L3 AND P/DT
Examining the search result.

=> D SCAN
L4  175 ANSWERS HCAPLUS COPYRIGHT 2006 ACS on STN
IC  ICM B32B0027-28
ICS B32B0017-10
INCL 428422000
CC  42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 38, 57, 73, 74
TI  Fluoropolymer blend antireflection coatings and coated articles
ST fluoropolymer coating antireflection; fluoroalkyl methacrylate copolymer coating antireflection; methacrylic acid copolymer coating antireflection; hydroxyethyl methacrylate copolymer coating antireflection; optical surface antireflection coating; glass antireflection coating; crosslinking antireflection coating
IT Fluoropolymers
RL: USES (Uses)
   (antireflection coatings contg., crosslinkable)
IT Cathode-ray tubes
IT Eyeglasses
IT Photographs
IT Windows
   (antireflection coatings for, crosslinkable fluoropolymers for)
IT Polycarbonates, miscellaneous
IT Polyesters, uses
 RL: MSC (Miscellaneous)
   (films, antireflection coatings for, crosslinkable fluoropolymers for)
IT Crosslinking
Guide to STN Patent Databases

(fluoropolymer compns. for, as antireflection coatings)

IT Optical materials
   (antireflective films, fluoropolymers, crosslinkable)
IT Optical imaging devices
   (electrooptical liq. crystal, antireflection coatings for, crosslinkable fluoropolymers for)
IT 37626-13-4 138982-12-4
RL: USES (Uses)
   (crosslinkable antireflection coatings contg.)
IT 25038-54-4, Poly[imino(1-oxo-1,6-hexanediyl)], uses 25038-59-9, uses
RL: USES (Uses)
   (films, antireflection coatings for, crosslinkable fluoropolymers for)
IT 7440-21-3, Silicon, uses
RL: USES (Uses)
   (wafers, antireflection coatings for, crosslinkable fluoropolymers for)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): END

56.1.2 Search in USPATFULL

=> FIL USPATFULL
FILE "USPATFULL" ENTERED
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Here we can use the same search query as in HCA (see above).

=> S L1
   1972 OPTICAL MATERIALS/CT
   5412 LENS?/IT
   91157 COAT?/IT
   3263 ANTIREFLECT?/IT
L5 5 OPTICAL MATERIALS/CT(L) LENS?(L) COAT?(L) ANTIREFLECT?)/IT

=> S L2
   3553 LENSES/CT
   91157 COAT?/IT
   3263 ANTIREFLECT?/IT
L6 42 LENSES/CT(L) COAT?(L) ANTIREFLECT?)/IT

Only US patents are retrieved.

=> S L5-6
L7 43 (L5 OR L6)

=> D BRO
:*IT
.
L7 ANSWER 1 OF 43 USPATFULL on STN
IT Polycarbonates, uses
   (lens; ultralow residual reflection, low stress antireflective lens coating)
IT Antireflective films
IT Lenses
   (ultralow residual reflection, low stress antireflective lens coating)
IT Vapor deposition process
   (vacuum; ultralow residual reflection, low stress antireflective lens coating)
IT 1344-28-1, Aluminum oxide, uses 7631-86-9, Silicon oxide, uses
   11129-18-3, Cerium oxide 13463-67-7, Titanium oxide, uses
   (ultralow residual reflection, low stress antireflective lens coating)
: END

56.2 Example 2

We are preparing a search strategy for Azo Dyes. To identify relevant search terms we will use the on-line thesaurus in the /CT field.
Search examples

56.2.1 Search in HCAPLUS

Due to the Search Term Fees in CAPLUS (CA) it is better to use HCAPLUS (HCA) if we are going to work with the on-line thesaurus.

=> FILE HCAPLUS
FILE 'HCAPLUS' ENTERED
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

From the thesaurus we see that 'Azo Dyes' is a CA Index Term and that there are 32 Associated Terms.

=> E AZO DYES/CT
E# FREQUENCY AT TERM
-- -------- --- -----
E1 0 3 AZO DISPERS DYES/CT
E2 0 2 AZO DYE INTERMEDIATES/CT
E3 5415 32 -> AZO DYES/CT
E4 0 11 AZO DYES (L) ACID/CT
E5 0 10 AZO DYES (L) BASE/CT
E6 0 11 AZO DYES (L) CAT I ONI C/CT
E7 0 10 AZO DYES (L) DI CHROI C/CT
E8 0 11 AZO DYES (L) DI RECT/CT
E9 0 11 AZO DYES (L) DI SAZO/CT
E10 0 12 AZO DYES (L) DI SPERSE/CT
E11 0 11 AZO DYES (L) DI SPERE/CT/CT
E12 0 10 AZO DYES (L) POLYMERIZABLE/CT

=> E E3+ALL
E1 11835 BT3 Chemical compounds/CT
E2 46140 BT2 Organic compounds/CT
E3 4082 BT1 Azo compounds/CT
E4 17543 BT3 Materials/CT
E5 6649 BT2 Coloring materials/CT
E6 112507 BT1 Dyes/CT
E7 5415 --> Azo dyes/CT

HNT Valid heading during volume 56 (1962) to present.

=> S E7+OLD, NT
L1 36714 'AZO DYES'+OLD,NT/CT (22 TERMS)
56.3 Example 3

Combined sequence and bibliographic search in USGENE

USGENE is characterised by the fact that sequence searches can be refined with text searches in original abstracts / original titles / main claim.

In the example below the result of a DNA sequence search (BLAST) is linked with a key word search. The following steps are performed:

1. Upload of the sequence to STN
2. BLAST search, the BLAST filter is switched off.
3. Sorting of the sequence answers by homology
4. Displaying the alignments
5. Refining with key words in the Basic Index and Main Claim
6. Renewed sorting of the answers by homology
7. Sorting of the answers by patent families with FSORT
8. Displaying of the relevant answers, one answer per family
56.3.1 Search in USGENE

=> FIL USGENE

The search sequence is loaded to USGENE using the UPLOAD command.

=> UPLOAD R BLAST
START LOCAL KERMIT TRANSMIT PROCESS
UPLOAD SUCCESSFULLY COMPLETED
L1 GENERATED

By D LQUE the correct UPLOAD is verified.

=> D LQUE

L1 ANSWER 1 USGENE COPYRIGHT 2007 SEQUENCEBASE CORP on STN
LQUE ttaatttttag tttatattaaca gtaagttcgt atatcaatgt ttagtgctccccaaaaattga
tagttgaatt ttaaaagcag ctgtgtagat ttagttagatttttttccaa gaaattcatt
ttgatttt tttgaaaaag gattttttaatag aataatac atgttagatgt ttagatatatgt
tctatatctaatagatagagaaaa gtaggaatatt aacttgtttc ctaggttaa

tgaatattaatagcacaaccag ccgcagatata aacgagagat aacgcatttttt
tcccatcccatatccctc agtcaaataa caacacctaa aacagatttttt
gatggtgtgatc aacaaaaag ttgcttatataaagat ttagaatgatg gaaagtatttt
gatgttctgtgtaagaagc gatatgtatttt aattgaa at gaaaaaattttttt

tctctcagggtaat atcctcgtgaaatgt tattacatttt cacatatttt
atggaacaggggttttgacgt ttagtggtgcg acatcattttctgtttagcagttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttttt
L2

Answer set arranged by accession number; to sort by descending similarity score, enter at an arrow prompt (=>) "sor score d".

With SOR SCORE the sequence answers are sorted by homology.

=> SOR SCORE D
PROCESSING COMPLETED FOR L2

L3

With the free display format TRIAL ALIGN the sequence answers can be displayed.

=> D TRIAL ALIGN 1-57

L3

Answer 1 of 57 USGENE COPYRIGHT 2007 SEQUENCEBASE CORP on STN
TI Staphylococcus aureus polynucleotides and sequences
(PublishedApplication)
MTY nucleic acid
SQL 900
BLASTALIGN
Query = 900 letters
Length = 900
Score = 1784 bits (900), Expect = 0.0
Identities = 900/900 (100%)
Strand = Plus / Plus

Query: 1 taatgtttagtttattaaacagtaagttcgtatatcaatgtttagtgctccccaaaattga

Sbjct: 1 taatgtttagtttattaaacagtaagttcgtatatcaatgtttagtgctccccaaaattga

...
The key word search is executed in the basic index and the main claim: /BI, ECLM

=> S L3 AND (STAPHYLOCOCC? OR STAPHYLO[(W)COCC?] OR COCCI OR BACILL?] OR BACTERI? OR EUBACTER? OR FIRMICUT?)/BI, ECLM

L4 15 L7 AND (STAPHYLOCOCC? OR STAPHYLO[(W)COCC?] OR COCCI OR BACILL?] OR BACTERI? OR EUBACTER? OR FIRMICUT?)/BI, ECLM

After the key word search the answer set needs to be sorted again by SCORE.

=> SOR SCORE D

PROCESSING COMPLETED FOR L4

L5 15 SOR L4 SCORE D

With the help of the FSORT command the 15 sequence answers are sorted into 7 patent families

=> FSORT L5

SEL L5 1- PN, APPS

L6 SEL L9 1- PN APPS : 17 TERMS

L6 15 FSO L5

4 Multi-record Families Answers 1-12
  Family 1 Answers 1-3
  Family 2 Answers 4-6
  Family 3 Answers 7-9
  Family 4 Answers 10-12
3 Individual Records Answers 13-15
0 Non-patent Records

Of the 7 families the first answer each with the best homology is displayed; D PFAM is used for the family display.

=> D PFAM=1- BRIEF ALIGN

L6 ANSWER 1 OF 15 USGENE COPYRIGHT 2007 SEQUENCEBASE CORP on STN FAMILY 1
AN 20070020746.327 nucleic acid USGENE
TI Staphylococcus aureus polynucleotides and sequences
(Published Application)
IN Kunsch Charles A. (Norcross, GA); Choi Gil H. (Rockville, MD); Barash Steven C. (Rockville, MD); Dillon Patrick J. (Carlsbad, CA); Fannon Michael R. (Silver Spring, MD); Rosen Craig A. (Laytonsville, MD)
PA No assignee at publication
PI US 20070020746 A1 20070125
A1 US 20040807556 20040324
ED 20070331
DT Patent
AB The present invention provides polynucleotide sequences of the genome of Staphylococcus aureus, polypeptide sequences encoded by the polynucleotide sequences, corresponding polynucleotides and polypeptides, vectors and hosts comprising the polynucleotides, and assays and other uses thereof. The present invention further provides polynucleotide and polypeptide sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use.
ECLM US20070020746 A1: 1. An isolated protein-encoding nucleic acid fragment of the Staphylococcus aureus genome, wherein said fragment consists of the polynucleotide sequence of any one of the fragments of SEQ ID NOS:1-5,191 depicted in Tables 2 and 3, or a degenerate variant thereof.
SSO NUCLEIC; PSIPS; APPLICATION
ORGN Not provided
SOL 900
SEQ
1 taatgttttag ttatatccac gtaagttcgt atatcaatgt ttagtgctcc
51 ccaaaattga agtttgaatt ttaaaagcat cttgtagaat ttagttgtat
101 ttatatttcac gaaatcatt tttgattattt tttgataatga gcattttaat
151 ahtatatcac gtttatagtg ttagtatatat gcattatata aacatatactat
201 ttagataata gtagataata ttagataata ttagataata gtagataata
251 atatcctttc atatcctttc atatcctttc atatcctttc atatcctttc
301 atatcctttc atatcctttc atatcctttc atatcctttc atatcctttc
Guide to STN Patent Databases

BLASTALIGN

Query = 900 letters
Length = 900
Score = 1784 bits (900), Expect = 0.0
Identities = 900/900 (100%)
Strand = Plus / Plus

Query: 1  taatgtttagtttattaacagtaagttcgtatatcaatgtttagtgctccccaaaattga
        ||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||||| |||
## 57 Numeric Property Search example

### 57.1 Example 1

**Search in the context of the fulltext:** To make Italian espresso a water pressure exceeding 9 bar must be used. We are searching espresso machines working at that pressure.

Proximity operators can be used as in a normal text search.

=> S PRES>9BAR (S) (COFFEE? OR ESPRESSO? OR ESPRESSO? OR NESPRESSO? )
L3 227 PRES>9BAR (S) (COFFEE? OR KAFFEE? OR EXPRESSO? OR ESPRESSO? OR NESPRESSO? )

In addition the search result is limited to “apparatus for making beverages“ with A47J0031.

=> S L3 AND A47J0031/IPC
L4 96 L3 AND A47J0031/IPC

=> D 10 TI PA KW C
L4 ANSWER 10 OF 96 PCTFULL COPYRIGHT 2011 LNU on STN
TIEN PUMP MOUNT IN A BEVERAGE PREPARATION MACHINE
TIFR MONTAGE DE POMPE DANS UNE MACHINE DE PREPARATION DE BOISSON
PA NESTEC S.A., Avenue Nestle 55, CH-1800 Vevey, CH, [NAT: CH, RES: CH], for all designated states except US:
MOerl, Peter, Burghubelstrasse 1, CH-3272 Walperswil, CH, [NAT: CH, RES: CH], for US only:
LANG, Markus, Neslerenweg 80, CH-3084 Wabern, CH, [NAT: CH, RES: CH], for US only
IPC A47J0031-46 [I,A]; A47J0031-44 [I,A]; A47J0031-44 [I,C]

DETDEN...
1 illustrates different parts of a beverage preparation machine. Typically, this type of beverage preparation machine is suitable to prepare coffee, tea and/or other hot beverages including soups and like food preparations. The pressure of the liquid circulated to the brewing chamber may for instance reach about 10 to 20 bar. The various parts of the beverage preparation machine and its assembly is disclosed in WO 2009/130099, the...

### 57.2 Example 2

Automatic conversion of units: In a search for 30-40 degrees Celsius (unit of temperature) the unit is automatically converted and the correct range in Fahrenheit or Kelvin (SI unit) is searched.

=> S 30-40 CELSIUS/TEMP
L2 136689 30-40 CELSIUS/TEMP

=> D KW C
L2 ANSWER 1 OF 136689 PCTFULL COPYRIGHT 2011 LNU on STN
DETDEN...
temperature. The mixture was heated to 35 °C for 3 h....
L2 ANSWER 3 OF 136689 PCTFULL COPYRIGHT 2011 LNU on STN
DETDEN...
formed hydrogels after incubating at 37 °C for 24 hr as...
L2 ANSWER 12 OF 136689 COPYRIGHT 2011 LNU on STN
DETDEN...
to a temperature from about 50 degrees Fahrenheit to about 550 degrees Fahrenheit... 
L2 ANSWER 32 OF 136689 COPYRIGHT 2011 LNU on STN
DETDEN...
temperature is within the range 263 Kelvin to 333 Kelvin
57.3 Example 3

Non-SI units: For some quantities, non-SI units (INCH/SIZ, FOOT/SIZ, ATM/PRES, FAHRENHEIT/TEMP, etc.) can be used for searching. The search is automatically performed in the correct SI unit.

You may even use imperial units for searching.

=> S 1-5 INCH/SIZ
L3 251985 1-5 INCH/SIZ

=> D KWIC
L3 ANSWER 1 OF 251985 PCTFULL COPYRIGHT 2011 LNU on STN

The search is automatically performed in the correct SI unit.

=> S 100 FAHRENHEIT/TEMP
L4 43153 100 FAHRENHEIT/TEMP

=> D KWIC
L4 ANSWER 1 OF 43153 PCTFULL COPYRIGHT 2011 LNU on STN

100°F = 37.77°C; this is correct.

57.4 Example 4

Percentage: We are searching alloys of bismuth, lead, tin, and cadmium, wherein bismuth and lead have a defined percentage.

=> S ALLOY (S) (BISMUTH (1A) 40-60/PERCENT (S) LEAD (1A) PERCENT>20 (S) TIN (S) CADMIUM)
L8 17 ALLOY (S) (BISMUTH (1A) 40 PERCENT - 60 PERCENT /PERCENT (S) LEAD (1A) PERCENT>20 PERCENT (S) TIN (S) CADMIUM)

=> D KWIC
L8 ANSWER 1 OF 17 PCTFULL COPYRIGHT 2011 LNU on STN

Temperature curing processes is used to cover the fasteners. One example of such an alloy is a eutectic alloy, made of about 50% bismuth, about 26.7% lead, about 13.3% tin, and about 10% cadmium by weight, and with a melting point of approximately 70°C (158°F). During the curing...

L8 ANSWER 2 OF 17 PCTFULL COPYRIGHT 2011 LNU on STN

Lowered clearly, if a such alloy contains approx. 14% to 60% bismuth, 20% to 30% lead or up to 45% tin or also antimony, cadmium, indium, zinc, tellurium, mercury or thallium. In particular with initially the...
58  Search by name (Inventor) example

58.1  Example 1

We are looking for the patents of Jozsef Bugovics, the inventor of the ‘anti-virus PC card’.

58.1.1  Search in DWPI

=> FIL WPINDEX
FILE 'WPINDEX' ENTERED
COPYRIGHT (C) 2013 THE THOMSON CORPORATION

Always recommended for name searches: EXPAND.
Apart from /IN also /PA should be used.

=> E BUGOVICS/IN, PA
E1    24    BUGOV KH U/IN
E2     1    BUGOV O S/IN
E3    22    BUGOVICS/IN
E4     4    BUGOVICS/PA
E5     5    BUGOVICS G/IN
E6    17    BUGOVICS J/IN
E7     4    BUGOVICS J/PA
E8     3    BUGOVSKII/IN
E9     1    BUGOVSKII/PA
E10    1    BUGOVSKII D S/IN
E11    1    BUGOVSKII N V/IN
E12    1    BUGOVSKII N V/PA

Search for the appropriate E numbers.

=> S E6-7
   17 "BUGOVICS J"/IN
   4 "BUGOVICS J"/PA
L1   17 ("BUGOVICS J"/IN OR "BUGOVICS J"/PA)

Displaying some of the documents in the free SCAN format.

=> D SCAN
L1   17 ANSWERS WPINDEX COPYRIGHT 2013 THOMSON REUTERS on STN
T1 Decoding equipment for digital information - enables encoding and decoding of digital information, with decoding unit guaranteeing access to those authorised and excluding those unauthorised

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): 3

L1   17 ANSWERS WPINDEX COPYRIGHT 2013 THOMSON REUTERS on STN
T1 Computer-aided financial transaction system - has customer and dealer systems connected by secure transmission system
L1   17 ANSWERS WPINDEX COPYRIGHT 2013 THOMSON REUTERS on STN
T1 Entry device for financial transactions using an automatic teller card
L1   17 ANSWERS WPINDEX COPYRIGHT 2013 THOMSON REUTERS on STN
T1 Adaptive fuel as substitute for wood fuel pellets obtained by crushing seed or fruit admixed with calcium oxide

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): END
58.1.2  Search in PATDPAFULL

=> FL PATDPAFULL
FILE 'PATDPAFULL' ENTERED
COPYRIGHT (C) 2013 DPMA

Again we start with an EXPAND on the name in /IN and /PA..

=> E BUGOVICS/IN, PA
E1      1      BUGOSH MARK J STERLING HEIGHTS MICHIGAN 48313 US/IN
E2      1      BUGOSLAW/IN
E3      8      => BUGOVICS/IN
E4      3      BUGOVICS/PA
E5      2      BUGOVICS JOZSEF 04430 DOELZIG DE/IN
E6      2      BUGOVICS JOZSEF 06254 ZWEIMEN DE/IN
E7      2      BUGOVICS JOZSEF 06886 LUTHERSTADT WITTENBERG DE/IN
E8      1      BUGOVICS JOZSEF O 4252 LUTHERSTADT EISLEBEN DE/IN
E9      1      BUGOVICS JOZSEF O 4600 WITTENBERG LUTHERSTADT DE/IN
E10     1      BUGOVICS, JOZSEF, O 4252 LUTHERSTADT EISLEBEN, DE/PA
E11     2      BUGOVICS, JOZSEF, O 4600 WITTENBERG LUTHERSTADT, DE/PA
E12     1      BUGREEV/IN

In this search we find 15 documents.

=> S E5-11
2 "BUGOVICS JOZSEF 04430 DOELZIG DE"/IN
2 "BUGOVICS JOZSEF 06254 ZWEIMEN DE"/IN
2 "BUGOVICS JOZSEF 06886 LUTHERSTADT WITTENBERG DE"/IN
1 "BUGOVICS JOZSEF O 4252 LUTHERSTADT EISLEBEN DE"/IN
1 "BUGOVICS, JOZSEF, O 4600 WITTENBERG LUTHERSTADT DE"/IN
1 "BUGOVICS, JOZSEF, O 4252 LUTHERSTADT EISLEBEN, DE"/PA
2 "BUGOVICS, JOZSEF, O 4600 WITTENBERG LUTHERSTADT, DE"/PA
L2     9      "BUGOVICS JOZSEF 04430 DOELZIG DE"/IN OR "BUGOVICS JOZSEF 06254 ZWEIMEN DE"/IN OR "BUGOVICS JOZSEF 06886 LUTHERSTADT WITTENBERG DE"/IN OR "BUGOVICS JOZSEF O 4252 LUTHERSTADT EISLEBEN DE"/IN

Display of the titles.

=> D 1-11 T1
L2     ANSWER 1 OF 9 PATDPAFULL COPYRIGHT 2013 DPMA on STN
T1     Adaptive Brennstoff aus Oelpresskuchen in Form von Pellets
IN     Bugovics, Jozsef, 06254 Zweimen, DE
PA     Neo Energy AG, Baar, CH
L2     ANSWER 2 OF 9 PATDPAFULL COPYRIGHT 2013 DPMA on STN
T1     Beweissicheres und schnelles WORM-Speichersystem auf Festplattenbasis
IN     Bugovics, Jozsef, 06254 Zweimen, DE
PA     Memory Data GmbH, 06254 Zweimen, DE
L2     ANSWER 3 OF 9 PATDPAFULL COPYRIGHT 2013 DPMA on STN
T1     Verfahren zur Funktion, Implementation sowie Selbstkonfiguration einer
        Finanz-Transaktions-Schnittstelle
IN     Bugovics, Jozsef, 04430 Doelzig, DE
PA     Me Technology Europe GmbH, 04430 Doelzig, DE
L2     ANSWER 4 OF 9 PATDPAFULL COPYRIGHT 2013 DPMA on STN
T1     Verfahren zur universellen Kreditkartenutzung
IN     Bugovics, Jozsef, 04430 Doelzig, DE
PA     Me Technology Europe GmbH, 04430 Doelzig, DE

Do the documents from PATDPAFULL concern the same inventions as the documents found in DWPI? To test this we use the TRANSFER command. 16 documents are found in PATDPAFULL now.

=> TRANSFER L1 1- PN
L3     TRANSFER L1 1- PN : 43 TERMS
L4     16 L3
Search examples

There are some documents that we did not find by the name search. However, there are other names in these documents.

=> S L4 NOT L2
L5 8 L4 NOT L2

=> D 1. TI IN PA

L5 ANSWER 1 OF 8 PATDPAFULL COPYRIGHT 2013 DPMA on STN
TI Adaptive Brennstoff
PA Neo Energy AG, Baar, CH

L5 ANSWER 2 OF 8 PATDPAFULL COPYRIGHT 2013 DPMA on STN
TI Eingabegeraet fuer Geschaftsvorfaelle
PA Me Technology Europe GmbH, 04430 D oelzig, DE

L5 ANSWER 3 OF 8 PATDPAFULL COPYRIGHT 2013 DPMA on STN
TI Anordnung zur rechnergestuetzten Zahlungsabwicklung ueber Zahlungssysteme
PA ESD Information Technology Entwicklungs GmbH, 04430 Doelzig, DE

L5 ANSWER 4 OF 8 PATDPAFULL COPYRIGHT 2013 DPMA on STN
TI Anordnung eines Integrationssystems und Verfahren zur Verwaltung von Finanzdienstleistungen zur Einbindung von Bankfilialen in Netzwerke
IN Antrag auf Nichtnennung (AANN)
PA ESD Information Technology Entwicklungs GmbH, 04430 Doelzig, DE

L5 ANSWER 5 OF 8 PATDPAFULL COPYRIGHT 2013 DPMA on STN
TI Verfahren zum Erstellen eines Informationsverteilungssystems fuer beliebig viele geschlossene Nutzergruppen mit Hilfe einer physikalischen Einheit
IN Antrag auf Nichtnennung (AANN)
PA Strohschneider, Sabine, 39576 Stendal, DE

L5 ANSWER 6 OF 8 PATDPAFULL COPYRIGHT 2013 DPMA on STN
TI Entschlusselungseinrichtung von Entschlusselungsalgorithmen und Verfahren zur Durchfuehrung der Ver- und Entschlusselung derselben
IN Antrag auf Nichtnennung (AANN)
PA ESD Vermoegensverwaltungsgesellschaft mbH, 80333 Muenchen, DE

L5 ANSWER 7 OF 8 PATDPAFULL COPYRIGHT 2013 DPMA on STN
TI Entschlusselungseinrichtung von digitalen Informationen und Verfahren zur Durchfuehrung der Ver- und Entschlusselung derselben
IN Antrag auf Nichtnennung (AANN)
PA ESD Vermoegensverwaltungsgesellschaft mbH, 80333 Muenchen, DE

L5 ANSWER 8 OF 8 PATDPAFULL COPYRIGHT 2013 DPMA on STN
TI Entschlusselungseinrichtung von digitalen Informationen und Verfahren zur Durchfuehrung der Ver- und Entschlusselung derselben
IN Antrag auf Nichtnennung (AANN)
PA ESD Vermoegensverwaltungsgesellschaft mbH, 80333 Muenchen, DE

Using the crossover options a better result can be achieved than by searching in one file only. In DWPI the inventor name BUGOVICS came from other family members. Have we found all the documents of the inventor BUGOVICS in DWPI?

=> S L2 NOT L4
L6 1 L2 NOT L4

=> D TI IN PA PI

This German utility model was not found. German utility models are covered since 1996 only.
58.2 Example 2

Searching for patents of Wolfgang Adamek.

58.2.1 Search in INPADOCDB

=> FIL INPADOCDB
FILE 'INPADOCDB' ENTERED
COPYRIGHT (C) 2007 European Patent Office / FIZ Karlsruhe

In INPADOCDB it is always recommended to search the standard field INS together with IN.

E1 5 ADAMEK WOLFGANG/IN
E2 5 ADAMEK WOLFGANG/INS
E3 31 => ADAMEK WOLFGANG/IN
E4 41 ADAMEK WOLFGANG/INS
E5 7 ADAMEK WOLFGANG DIPLO ING/IN
E6 17 ADAMEK WOLFGANG DIPLO ING/INS
E7 5 ADAMEK WOLFGANG DIPLO ING 53797 LOHMAR DE/IN
E8 1 ADAMEK WOLFGANG ING/IN
E9 1 ADAMEK WOLFGANG ING/INS
E10 1 ADAMEK ZBIGNIEW/IN
E11 4 ADAMEK ZBIGNIEW/INS
E12 6 ADAMEK ZDENEK/INS

=> S E3 - E9
L1 57 "ADAMEK WOLFGANG"/IN OR "ADAMEK WOLFGANG"/INS OR "ADAMEK WOLFGANG DIPLO ING"/IN OR "ADAMEK WOLFGANG DIPLO ING"/INS OR "ADAMEK WOLFGANG DIPLO ING 53797 LOHMAR DE"/IN OR "ADAMEK WOLFGANG ING"/IN OR "ADAMEK WOLFGANG ING"/INS"

Maybe the name was even entered in a wrong order.

=> E WOLFGANG ADAMEK/IN, INS
E1 1 WOLFGANG ADAMEEKU/IN
E2 1 WOLFGANG ADAMEEKU/INS
E3 12 => WOLFGANG ADAMEK/IN
E4 3 WOLFGANG ADAMEK/INS
E5 3 WOLFGANG ADAMETZ/IN
E6 1 WOLFGANG ADAMETZ/INS
E7 1 WOLFGANG ADAMI TZKI/IN
E8 3 WOLFGANG ADAMI TZKI/INS
E9 9 WOLFGANG ADAMS/IN
E10 1 WOLFGANG ADLER/IN
E11 1 WOLFGANG ADLHOCH/IN
E12 6 WOLFGANG ADOLF BINDER/IN

=> S E3 - E4
L2 13 "WOLFGANG ADAMEK"/IN OR "WOLFGANG ADAMEK"/INS

=> S L1 OR L2
L3 59 L1 OR L2

It is also a good idea to search the first and family name separately in the /IN field and combine them by (S) proximity. (S) must be entered manually because there is a mixed index (no interpretation) and no implied proximity in /IN.

=> S (WOLFGANG(S) ADAMEK)/IN, INS
L4 60 (WOLFGANG(S) ADAMEK)/IN, INS

=> S L4 NOT L3
L5 1 L4 NOT L3

One more document was found where the inventor field was entered incorrectly.

=> D
L5 ANSWER 1 OF 1 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
AN 40437142 INPADOCDB UP 20061216
TI Hydraulic circuit for stabilising the lower links of a tractor
three-point linkage.

The inventor names should also be searched in the patent assignee field /PA. Sometimes only the patent assignee field is filled, e.g. for German utility models.

=> S (ADAMEK(S) WOLFGANG)/IN,INS,PA,PAS
L6  57 (ADAMEK(S) WOLFGANG)/IN,INS,PA,PAS

=> S L6 NOT L4
L7  1 L6 NOT L4

=> D
L7  ANSWER 1 OF 1  INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN

AN 20852442 INPADOCDB UP 20061118
TI TUERVERRIEGELUNGSKNOPF FUER KRAFTWAGEN.
TL German
PA ADAMEK, WOLFGANG, 2105 SEEVETAL
DT Utility Model
PI DE 7718588 U1 19770922
PIT DEU Application for a utility model
DAV 19770922 printed with grant
STA GRANTED
AI DE 1977-18588 U 19770613
AIT DEU Application for a utility model
PRAI DE 1977-18588 U 19770613 (DEU)
PRAIT DEU Application for a utility model
59 Search by name (Patent assignee) example

59.1 Example 1

We are looking for patents by Philips NV in Russia or in the former Soviet Union, respectively.

59.1.1 Search in INPADOCDB

We use QUERY because we expect a large number of patents with the publication countries SU or RU.

The search in the /PA field yields a large number of patents.

The search in the /PAS field yields still more patents.

Combining the two results by OR.

Let us now see what documents were found with /PAS but not with /PA.

Due to the transfer of the names into Cyrillic letters Ph has become F. The PAS field holds the correct Latin spelling.

The /PAS field is only available in INPADOC. It should be used with name searches in addition to /PA to obtain a better result.
Search examples

59.1.2 Search in DWPI

=> File WPINDEX
FILE 'WPINDEX' ENTERED
COPYRIGHT (C) 2013 THOMSON REUTERS

We search the /PA field for Philips.

=> S PHILIPS/PA AND L1
   67977 PHILIPS/PA
   24540 SU/DS
   118335 SU/PC
   1206568 SU/PCS
   (SU/DS, PC)
   1793979 RU/DS
   530015 RU/PC
   2243557 RU/PCS
   (RU/DS, PC)
L6 21292 PHILIPS/PA AND L1

=> D TI PA
L6 ANSWER 1 OF 21292 WPINDEX COPYRIGHT 2013 THOMSON REUTERS on STN
TI Support for supporting patient for MRI system utilized for e.g. studies applications, has table top supported by support structure, and coil connector moved between engaged and disengaged positions when table top moves in and out of volume
PA (PHIG-C) KONINK PHILIPS ELECTRONICS NV

In the case of Philips the patent assignee code in the /PACO field may also be used.

=> S PHIG/PACO AND L1
   54161 PHIG/PACO
   (PHIG-C/PACO)
   24540 SU/DS
   118335 SU/PC
   1206568 SU/PCS
   (SU/DS, PC)
   1793979 RU/DS
   530015 RU/PC
   2243557 RU/PCS
   (RU/DS, PC)
L7 21193 PHIG/PACO AND L1

=> S L7 NOT L6
L8 4 L8 NOT L7

With PACO certain inconsistencies in the names can be balanced.

=> D TI PA
L9 ANSWER 1 OF 67 WPINDEX COPYRIGHT 2007 THOMSON CORP on STN
TI Picture display device used in e.g. television apparatus, computer monitor has neck portion manufactured from same material as conical portion or from same material as display screen
PA (GLDS-C) LG PHILIPS DISPLAYS

L9 ANSWER 2 OF 67 WPINDEX COPYRIGHT 2007 THOMSON CORP on STN
TI Electron gun for cathode ray tubes in television, computer monitors, has dynamic astigmatism and focusing lens section arranged on main lens section forming integrated dynamic astigmatism and focusing main lens section
PA (GLDS-C) LG PHILIPS DISPLAYS HOLDING BV

L9 ANSWER 3 OF 67 WPINDEX COPYRIGHT 2007 THOMSON CORP on STN
TI Pivot hood assembly for roof mounted ventilation shaft controls flow of air entering or exiting the ventilation shaft when the attachment framework is fixed to the ventilation shaft and the hood pieces are
Example 2

Searching for patents of the firm Buckeye, which works in the technical area of cellulose.

59.2.1 Search in DWPI

First we try to EXPAND on the name. We cannot be sure to get all spelling variations of the name.

=> E BUCKEYE/PA 25

E1 1 BUCKEY D/PA
E2 1 BUCKEY J C/PA
E3 188 --> BUCKEYE/PA
E4 2 BUCKEYE BLUEGRASS FARMS/PA
E5 4 BUCKEYE BLUEGRASS FARMS INC/PA
E6 2 BUCKEYE BOXES INC/PA
E7 1 BUCKEYE BOYS LLC/PA
E8 1 BUCKEYE CABLEVISION INC/PA
E9 51 BUCKEYE CELLULOSE CORP/PA
E10 1 BUCKEYE DENTAL LLC/PA
E11 2 BUCKEYE FEED MILLS INC/PA
E12 2 BUCKEYE FIRE EQUIP CO/PA
E13 1 BUCKEYE FORGE DIV-GULF &/PA
E14 31 BUCKEYE INT INC/PA
E15 1 BUCKEYE MACHINE FABRICATORS INC/PA
E16 4 BUCKEYE MFG CO/PA
E17 1 BUCKEYE MFG INC/PA
E18 16 BUCKEYE MOLDING CO/PA
E19 1 BUCKEYE PHARM LLC/PA
E20 2 BUCKEYE STAMPING CO/PA
E21 1 BUCKEYE STAMPING CO INC/PA
E22 1 BUCKEYE STEEL CAST/PA
E23 3 BUCKEYE STEEL CASTI/PA
E24 2 BUCKEYE STEEL CASTING CO/PA
E25 25 BUCKEYE STEEL CASTINGS CO/PA
Now we select all patent assignees and have a look at the result. Be careful with a big answer set: every patent assignee selected will be charged. Thus, use only a limited number of documents for testing or use ANALYZE rather than SELECT. In this case (188 documents) ANALYZE is preferable over SELECT in DWPI.

```plaintext
=> ANALYZE L1 1- PA
L2
=> D 1-
L2
TERM #  OCC  # DOC  % DOC  PA
------  ----  ------  ------  ------
 1      51    51  27.13  BUCKEYE CELLULOSE CORP
 2      31    31  16.49  BUCKEYE INT INC
 3      27    27  14.36  BUCKEYE TECHNOLOGIES INC
 4      25    25  13.30  BUCKEYE STEEL CASTINGS CO
 5      19    19  10.11  BKI HOLDING CORP
 6      16    16  8.51   BUCKEYE MOLDING CO
 7      15    15  7.98   PROCTER & GAMBLE CO
 8      15    15  7.98   COLUMBUS STEEL CASTINGS CO
 9      14    14  7.37   BUCKEYE BLUEGRASS FARMS INC
10      14    14  7.37   BUCKEYE MFG CO
11      14    14  7.37   PROCTER & GAMBLE CE
12      14    14  7.37   THE BUCKEYE CELLULOSE CORP
13      13    13  6.89   BOEHMER B E
14      13    13  6.89   BUCKEYE STEEL CASTING CO
15      12    12  6.25   BUCKEYE STEPHENS LTD
16      12    12  6.25   BUCKEYE WESTERN INC
```
Now we search the correct entries from the list.

=> SEL 1 12 33 81
E1 THROUGH E4 ASSIGNED

=> S E1-E4

51 "BUCKEYE CELULOSE CORP"/PA
4 "THE BUCKEYE CELULOSE CORP"/PA
1 "BAKKAI CELULOSE CORP"/PA
1 "THE BUCKEYE CELULOSE CORPN"/PA

L3

56 ("BUCKEYE CELULOSE CORP"/PA OR "THE BUCKEYE CELULOSE CORP"/PA OR "BAKKAI CELULOSE CORP"/PA OR "THE BUCKEYE CELULOSE CORPN"/PA)

A search with (S) proximity in this case yields the same result.

=> S ((BUCKEYE OR BAKKAI)((S)CELLU?))/PA

188 BUCKEYE/PA
1 BAKKAI/PA
4097 CELLU?/PA

L4

56 ((BUCKEYE OR BAKKAI)((S)CELLU?))/PA

59.3 Example 3

Searching for patents of the company Haarmann & Reimer. The company merged with DRAGOCO into a new company named SYMRISE in 2003.

59.3.1 Search in INPADOCDB

=> F I L I N P A D O C D B
FILE 'INPADOCDB' ENTERED
COPYRIGHT (C) 2007 European Patent Office / FIZ Karlsruhe

First one should use EXPAND to identify the various spellings like in the previous examples. To find all spellings it is often useful to
Search examples

enter only the first word of the name. We use both the PA and PAS fields again.

=> E HAARMANN/PA, PAS 25
E1 1 HAARMAN REYMER CORP/PA
E2 1 HAARMAN REYMER CORP/PAS
E3 1588 => HAARMANN/PA
E4 1604 HAARMANN/PAS
E5 1 HAARMANN AND REIMER/PA
E6 1 HAARMANN AND REIMER/PAS
E7 1 HAARMANN AND REIMER CORP/PA
E8 1 HAARMANN AND REIMER CORP/PAS
E9 2 HAARMANN AND REIMER GMBH/PA
E10 2 HAARMANN AND REIMER GMBH/PAS
E11 3 HAARMANN AND REIMER GESELLSCHAFT MIT BESCHRANKTER HAFT/PA
E12 36 HAARMANN AND REIMER GMBH/PAS
E13 39 HAARMANN AND REIMER GMBH/PAS
E14 2 HAARMANN ANNEGRET/PA
E15 2 HAARMANN ANNEGRET/PAS
E16 27 HAARMANN ARNOLD DR ING/PA
E17 36 HAARMANN ARNOLD DR ING/PAS
E18 1 HAARMANN ARNOLD DR ING 4600 DORTMUND/PA
E19 7 HAARMANN AUGUST/PA
E20 1 HAARMANN AUGUST DR/PAS
E21 1 HAARMANN AUGUST DR ING/PA
E22 1 HAARMANN AUGUST DR ING/PAS
E23 1 HAARMANN BEIER/PA
E24 1 HAARMANN BEI MER/PA
E25 3 HAARMANN CO WERKZEUGFABRIK/PAS

=> E 25
E26 3 HAARMANN CO WERKZEUGFABRIK 5630 REMSCHEID/PA
E27 1 HAARMANN CO WERKZEUGFABRIK 5630 REMSCHEID DE/PA
.
E37 1 HAARMANN ET REIMER/PA
E38 1 HAARMANN ET REIMER/PAS
E39 16 HAARMANN ET REIMER GMBH/PA
E40 10 HAARMANN ET REIMER GMBH DT/PA
E41 1 HAARMANN ET REIMER GMBH DT/PAS
.
E93 6 HAARMANN REIMER GMBH A HOLZMINDEN ALLEMAGNE/PA
E94 1 HAARMANN REIMER GMBH A HOLZMINDEN BONDSREPUBLIEK DU/PA
E95 2 HAARMANN REIMER GMBH A HOLZMINDEN BONDSREPUBLIEK DU/PA
E96 1 HAARMANN REIMER GMBH A TE HOLZMINDEN BONDSREPUBLIEK DU/PA
E97 11 HAARMANN REIMER GMBH A TE HOLZMINDEN BONDSREPUBLIEK DU/PA
E98 8 HAARMANN REIMER GMBH A TE HOLZMINDEN BONDSREPUBLIEK DU/PA
E99 1 HAARMANN REIMER GMBH/PA
E100 1 HAARMANN REIMER GMBH/PA
.
E143 1 HAARMANNS/PA
E144 1 HAARMANNS/PAS
E145 1 HAARMANNS REIMER CORP/PA
E146 1 HAARMANNS REIMER CORP/PAS

There are scores of different spellings in particular for hyphenated names. It is useful to check different spellings (e.g. type the first part of the name and then directly a hyphen without blank) – but in our case there is no additional hit.

=> E HAARMANN- /PA, PAS
E1 1 HAARMANN WOLFRAM/PA
E2 1 HAARMANN WOLFRAM/PAS
E3 0 => HAARMANN-/PA
E4 0 HAARMANN-/PAS
E5 1 HAARMANNS/PA
E6 1 HAARMANNS/PAS

The strategy shown in example 2 (searching for one part of the name → ANALYZE/SELECT → joining the parts of the name with (S) proximity) is an essential aid for searching hyphenated names.
Guide to STN Patent Databases

Only the search with (S) proximity, based on the ANALYZE result, is shown here.

=> S ((HAARMANN OR HAARMAN OR HAAMAN OR HAARMANNS)(S)(REIMER OR RAI MA OR REIMBER OR REIM ERMPANY OR REYMER OR LEI MER OR LEI MER OR REI NER OR REMER)) / PA, PAS
L1 1433 ((HAARMANN OR HAARMAN OR HAAMAN OR HAARMANNS)(S)(REIMER OR RAIMA OR RAIMBER OR REIMERMPANY OR REYMER OR REI MER OR LEI MER OR LEI MER OR REI NER OR REMER)) / PA, PAS

A change of the patent assignee name, due to a merger or change of the patent assignee, is recorded in the legal status field, LSPA, only. It is often not entered in the PA or PAS fields. You should complement your search with the LSPA field. It is possible to take the field PASS, which covers PA, PAS and LSPA.

=> S ((HAARMANN OR HAARMAN OR HAAMAN OR HAARMANNS)(S)(REIMER OR RAIMA OR RAIMBER OR REIMERMPANY OR REYMER OR REIMER OR LEI MER OR LEI MER OR REI NER OR REMER)) / PA, PAS, LSPA
L2 1522 ((HAARMANN OR HAARMAN OR HAAMAN OR HAARMANNS)(S)(REIMER OR RAIMA OR RAIMBER OR REIMERMPANY OR REYMER OR REIMER OR LEI MER OR LEI MER OR REI NER OR REMER)) / PA, PAS, LSPA

In our case there are 89 more hits.

=> S L2 NOT L1
L3 89 L2 NOT L1

=> D PA PAS HIT 1-3
L3 ANSWER 1 OF 89 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
PA SYMRISE GMBH & CO. KG
PAS SYMRISE GMBH & CO KG, DE
LEGAL STATUS HIT
AN 49277284 INPADOCDB 20020823 USAS
ASSIGNMENT
HAARMANN & REIMER GMBH MUEHLENFELDSTR. 137603 HOLZ
ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS: WOEHRLE, INGO / AR; REEL/FRAME: 013237/0857; SIGNING DATES FROM 20020715 TO 20020805
CHG Change of Owner, Inventor, Applicant

L3 ANSWER 2 OF 89 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
PA SYMRISE GMBH & CO. KG
PAS SYMRISE GMBH & CO KG, DE
LEGAL STATUS HIT
AN 49269931 INPADOCDB 20020318 USAS
ASSIGNMENT
HAARMANN & REIMER GMBH MUEHLENFELDSTR. 1D 37603 HASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS: KUHN, WALTER / AR; REEL/FRAME: 012727/0025; SIGNING DATES FROM 20020212 TO 20020213
CHG Change of Owner, Inventor, Applicant

L3 ANSWER 3 OF 89 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
PA SYMRISE GMBH & CO. KG
PAS SYMRISE GMBH & CO KG, DE
LEGAL STATUS HIT
AN 49262061 INPADOCDB 20010529 USAS
ASSIGNMENT
HAARMANN & REIMER GMBH MUHLENFELDSTRASSE 137603 HO
ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR: MILTITZ AROMATICS GMBH / AR; REEL/FRAME: 011867/0223 20010412
CHG Change of Owner, Inventor, Applicant
59.4  Example 4

We are looking for the Patent Assignee Code of Kodak.

59.4.1  Search in DWPI

=> FIL WPINDEX
FILE 'WPINDEX' ENTERED
COPYRIGHT (C) 2006 THE THOMSON CORPORATION

We use the /PACO field to find entries that might be applicable.

== E KODAK/PACO
E   # FREQ AT  TERM
----  ------ -   -----
E 1      0   1 KODAIRA SANGYO KK/PACO
E 2      0   1 KODAIRA SEI SAKUSHO KK/PACO
E 3      0   1 -> KODAK/PACO
E 4      0   1 KODAK AG/PACO
E 5      0   1 KODAK AUSTRALASIA PTY LTD/PACO
E 6      0   1 KODAK BET-GMBH/PACO
E 7      0   1 KODAK BRASILEIRA COMERCIO & IND LTD/PACO
E 8      0   1 KODAK CLINICAL DIAGNOSTICS LTD/PACO
E 9      0   1 KODAK CO LTD/PACO
E10     0   1 KODAK IMAGEX LTD/PACO
E11     0   1 KODAK JAPAN/PACO
E12     0   1 KODAK LTD/PACO

The code for a probable entry can be displayed with this command.

== E E3+ALL
E1      0   1 -> KODAK/PACO
E2  26290 CODE EAST-C/PACO
********** END **********

With the DEF relation all entries belonging to this code are displayed.

== E E2+DEF
E1  26290   -> EAST-C/PACO
DEF CANADIAN KODAK
DEF EASTMAN KODAK CO
DEF EASTMAN KODAK JAPAN KK
DEF EASTMAN TECHN INC
DEF KODAK AG
DEF KODAK AUSTRALASIA PTY LTD
DEF KODAK BET-GMBH
DEF KODAK BRASILEIRA COMERCIO & IND LTD
DEF KODAK CLINICAL DIAGNOSTICS LTD
DEF KODAK CO LTD
DEF KODAK IMAGEX LTD
DEF KODAK JAPAN
DEF KODAK LTD
DEF KODAK MEDICAL LTD
DEF KODAK NEDERLAND BV
DEF KODAK PARK WORKS
DEF KODAK PATHE
DEF KODAK PATHE SA
DEF KODAK POLychrome Graphics
DEF KODAK POLychrome Graphics CO LTD
DEF KODAK POLychrome Graphics GmbH
DEF KODAK POLychrome Graphics KK
DEF KODAK POLychrome Graphics LLC
DEF LAB & SERVICES KODAK
DEF LAB & SERVICES KODAK SA
DEF NIHON DORO KODAN JAPAN HIGHWAY PUBLIC CO
DEF NIHON KODAK KK

********** END **********
Example 5
Finding related company names of the patent assignee Symrise.

59.5.1 Search in HCAPLUS

=> FILE HCAPLUS
FILE 'HCAPLUS' ENTERED
COPYRIGHT (C) 2013 AMERICAN CHEMICAL SOCIETY (ACS)

The CO (Corporate Name) field has a thesaurus for the name entries of major companies (since 1907).

EXPAND on the company name. If there is an entry in the Associated Terms (AT) column this indicates that thesaurus terms are available.

=> E SYMRISE/CO

E# FREQUENCY AT TERM
--- ---------- ---- ---------------
E1 1 SYMPOTOM TOLEABILILY RESPONSE TO EXERCISE TRIAL OF CAN
E2 1 SYMPTOM TOLERABILITY RESPONSE TO EXERCISE TRIAL OF CAN
E3 15 SYMRISE/CO
E4 64 SYMRISE AG/CO
E5 2 SYMRISE ASIA PACIFIC PTE LTD/CO
E6 2 SYMRISE CO LTD/CO
E7 1 SYMRISE G M B H/CO
E8 151 SYMRISE G M B H CO K G/CO
E9 4 3 SYMRISE G M B H CO KG/CO
E10 1 SYMRISE GMBH/CO
E11 25 2 SYMRISE GMBH AND CO KG/CO
E12 1 SYMRISE GMBH AND CO KGV/CO

EXPAND on an E-number of an appropriate name entry, followed by +ALL to see all thesaurus entries. The preferred company name is indicated by NAME.

=> E E8+ALL
E1 203 NAME SYMRISE GMBH CO KG/CO
E2 151 --> SYMRISE G M B H CO K G/CO
********** END **********

EXPAND on the E-number of the preferred name followed by +ALL to view all related company names.

=> E E1+ALL
E1 0 CNUM CAS1027755/CO
E2 203 --> SYMRISE GMBH CO KG/CO
E3 106 RT1 DRAGOCO/CO
E4 26 RT1 DRAGOCO G M B H/CO
E5 6 RT1 DRAGOCO GERBERDING AND CO AG/CO
E6 17 RT1 DRAGOCO GERBERDING CO AG/CO
E7 24 RT2 DRAGOCO GERBERDING CO A G/CO
E8 6 RT2 DRAGOCO GERBERDING CO AKTIENGESELLSCHAFT/CO
E9 5 RT1 DRAGOCO GERBERDING UND CO AG/CO
E10 5 RT2 DRAGOCO GERBERDING UND CO A G/CO
E11 5 RT1 DRAGOCO GERBERDING UND CO GMBH/CO
E12 47 RT2 DRAGOCO GERBERDING UND CO G M B H/CO
E13 5 RT1 DRAGOCO HOLZMINDEN/CO
E14 10 RT1 DRAGOCO INC/CO
E15 5 RT1 DRAGOCO SPEZIALFABRIK KONZ REICH UND AROMASTOFFE
E16 9 RT1 DRAGOCO SPEZIALFABRIK KONZ RIECH UND AROMASTOFFE
E17 11 RT1 DRAGOCO SPEZIALFABRIK KONZ RIECH UND AROMASTOFFE
E18 22 RT1 HAARMANN AND REIMER CORP/CO
E19 1 RT1 HAARMANN AND REIMER S LAB/CO
Search examples

E20  33  RT1  HAARMANN REIMER/CO
E21  16  RT1  HAARMANN REIMER CHEMISCHE FABRIK ZU HOLZMINDEN GMBH/CO
E22  120 RT1  HAARMANN REIMER GMBH/CO
E23  77  RT2  HAARMANN REIMER GMBH/CO
E24  190 RT1  HAARMANN UND REIMER GMBH/CO
E25  21  RT1  HAARMANN UND REIMER GMBH/CO
E26  4   RT1  SYMRISE GMBH AND CO KG/CO
E27  151 RT2  SYMRISE GMBH AND CO KG/CO
E28  25  RT1  SYMRISE GMBH AND CO KG/CO
E29  4   RT1  SYMRISE GMBH AND CO KG/CO

After the names have been checked the search is done with the relationship code +ALL.

=> S E2+ALL
L1  1136 "SYMRISE GMBH CO KG" +ALL/CO (29 TERMS)

With P/DT the result is restricted to patents.

=> S L1 AND P/DT
  8810496 P/DT
L2  743 L1 AND P/DT

It is necessary to complete this search in the /CO field with a search in the /PA (or /CS) field. The thesaurus is very useful to find different forms of a name.

If you are only interested in patents you can just search in the /PA field.

=> S (DRAGOCO OR SYMRISE OR (HAARMAN OR HAARMANN OR HAARMER) (S)(REIMER))/PA

130 DRAGOCO/PA
396 SYMRISE/PA
1  HAARMAN/PA
328 HAARMANN/PA
0  HAARMER/PA
338 REIMER/PA
326 (HAARMAN OR HAARMANN OR HAARMER) (S)(REIMER)/PA
L3  834 (DRAGOCO OR SYMRISE OR (HAARMAN OR HAARMANN OR HAARMER) (S)(REIMER))/CS

=> S L3 OR L2
L4  834 L2 OR L3

The search in the /CS field and restricting with P/DT yields 10 more documents.

=> S L5 AND P/DT
  8810496 P/DT
L6  844 L5 AND P/DT

=> S L6 NOT L4
L7  10 L6 NOT L4

These 10 documents are Defensive Publications (Research Disclosure). In these documents the company name is not entered in PA but in the CS field only.

=> D

L7  ANSWER 1 OF 10  HCAPLUS COPYRIGHT 2013 ACS on STN
59.6 Example 6

Searching for the company QUALCOMM. In US patent applications often only the inventors are entered or there is no patent assignee given at all. Therefore the search should be completed with a search in the AG field (Agent, Representative).

(The AG (Agent) or LREP (Legal Representative) field is available in these databases: AUPATFULL, CANPATFULL, DWPI, EPFULL, FRANCEPAT, IFIALL, IFIPEX, PATDPA, PATDPAFULL, PCTFULL, RUSSIAPAT, USPATFULL, USPAT2.)

59.6.1 Search in USPATALL

=> FILE USPATALL
FILE 'USPATFULL' ENTERED
FILE 'USPAT2' ENTERED
CA INDEXING COPYRIGHT (C) 2013 AMERICAN CHEMICAL SOCIETY (ACS)

=> S QUALCOMM/PA
L1 14887 QUALCOMM/PA

=> S QUALCOMM/AG
L2 8322 QUALCOMM/AG

=> S L1 OR L2
L3 18751 L1 OR L2

=> S L2 NOT L1
L4 3864 L2 NOT L1

=> D BIB
L4 ANSWER 1 OF 3864 USPATFULL on STN
AN 2011:50157 USPATFULL
TI Apparatus and Method of Searching Multi-Carrier Active Set Pilots
IN Lie, Gregory R., San Diego, CA, UNITED STATES
   Lin, Lijun, Escondido, CA, UNITED STATES
   Chan, Robert K., La Jolla, CA, UNITED STATES
   Gandhi, Manasi D., San Diego, CA, UNITED STATES
PI US 20110044294 A1 20110224
AI US 2009-544334 A1 20090820 (12)
DT Utility
FS APPLICATION
LREP QUALCOMM INCORPORATED, 5775 MOREHOUSE DR., SAN DIEGO, CA, 92121, US
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 809
Search in DWPI

Often only the inventor is entered in the PA field. Extending the search to the /AG field at the publication level yields 165 more hits. The display of original data (Member) in addition to the invention level does not cause additional charges.

Answer 1 of 165

Method for performing device management process on computing device from device management server, involves transmitting message to server indicating that intervening configuration data does not change

Member (0001)

AG QUALCOMM INCORPORATED
AGA: 5775 MOREHOUSE DR., SAN DIEGO, CA, US
Family search example

Search question

For the US patent numbered 6,300,146 equivalent applications in other countries or additional US patents are sought.

Search in INPAFAMDB

$ US 6300146/ PN

L1 1 US 6300146 /PN

BRIEF is the default format. This format provides a good overview of the whole patent family.

L1 ANSWER 1 OF 1 INPAFAMDB COPYRIGHT 2008 EPO/FIZ KA on STN

AN 15190523 INPAFAMDB

TI Halbleiterbauteil sowie Verfahren zur Messung seiner Temperatur.

HYBRID PACKAGE INCLUDING POWER MOSFET DIE AND CONTROL AND PROTECTION CIRCUIT DIE WITH SMALLER SENSE MOSFET.

Hybrid package including a power MOSFET die and a control and protection circuit die with a smaller sense MOSFET.

Ionizing bar and method of its fabrication.

INS THIERRY VINCENT, FR

PAS INT RECTIFIER CORP, US

IPC H01L0023-34 [I,A ]; H03K0017-08 [N,A ]; H03K0017-082 [I,A ];

H01L0023-34 [I,C*]; H03K0017-08 [N,C*]; H03K0017-082 [I,C*]

EPC H03K0017-082B

AB (US 6137165 A)

A power MOSFET die and a logic and protection circuit die are mounted on a common lead frame pad, such as a TO220 lead frame pad. The logic and protection circuit die includes a MOSFET that is connected in parallel with the power MOSFET but which is smaller than the power MOSFET and which dissipates power at a predetermined fraction of that of the power MOSFET. The logic and protection circuit die also includes a temperature sensor that is in close proximity to the MOSFET and determines the temperature of the MOSFET. The die also includes another temperature sensor that is located distant from the MOSFET to determine the temperature of the lead frame. The temperature of the power MOSFET can be determined from the temperature measured by these two sensors and from the ratio of the power dissipated by the two MOSFETs.

PATENT FAMILY INFORMATION INPAFAMDB

+------ PUBLICATIONS -------++------ APPLICATIONS -------+

DE 10031115 A1 20010125 DE 2000-10031115 A 20000526

JP 2000105855 A 20010119 JP 2000-189210 A 20000623

US 6137165 A 20000124 US 1999-344704 A 19990625

US 6300146 B1 20011009 US 2000-549280 A 20000414

+------- PRIORITIES -------+

US 1999-344704 A 19990625

US 2000-549280 A 20000414
60.3 Search in INPADOCDB

=> FIL INPADOCDB
FILE 'INPADOCDB' ENTERED
COPYRIGHT (C) 2008 European Patent Office / FIZ Karlsruhe

=> S US 6300146/PN
L1 1 US 6300146 / PN
    (US6300146/PN)

It is recommended to use D BROWSE if family formats are going to be displayed.

=> D BRO

If only equivalents of a specific country are wanted a 'Reduced Price Format' is recommended.

: FFAM.JP
L1 ANSWER 1 OF 1 INPADOCDB COPYRIGHT 2008 EPO/FIZ KA on STN

---------------
MEMBER 2
---------------

AN 39447716 INPADOCDB
TI HYBRID PACKAGE INCLUDING POWER MOSFET DIE AND CONTROL AND PROTECTION CIRCUIT DIE WITH SMALLER SENSE MOSFET.
TL English
IN THIERRY VINCENT
INS THIERRY VINCENT
PA INTERNATL RECTIFIER CORP
PAS INT RECTIFIER CORP
DT Patent
PI JP 2001015655 A 20010119
PIT JPA DOC. LAID OPEN TO PUBL. INSPEC. [PUBLISHED FROM 1971 ON]
DAV 20010119 unexamined-printed-without-grant
STA PRE-GRA NT PUBLICATION
AI JP 2000-189210 A 20000623
AIT JPA Patent application
PRAI US 1999-344704 A 19990625 (USA)
PRAIT USA Patent application
IC.V 7
ICM H01L0023-34
IPCR H01L0023-34 [I,A ]; H03K0017-08 [N,A ]; H03K0017-082 [I,A ]
    H01L0023-34 [I,C*]; H03K0017-08 [N,C*]; H03K0017-082 [I,C*]
EPC H03K0017-0828
ICO T03K0017:08T
FA AI; AN; DAV; DT; EPC; ICM; ICO; IN; INS; IPC; IPCR; PA; PAS; PI; PIT;
PRAI; TI

CFAM shows the publication details of all family members.

: IFAM
L1 ANSWER 1 OF 1 INPADOCDB COPYRIGHT 2008 EPO/FIZ KA on STN

PATENT FAMILY INFORMATION
AN 48656108 INPADOCDB

+---------------------------+       +---------------------------+
DE 10031115 A1 20010125
JP 2001015655 A 20010119
US 6137165 A 20001024
US 6300146 B1 20011009

2 priorities, 4 applications, 4 publications

IFAM displays a short synopsis of the patent family in a table first. Then the complete documents are displayed, including the abstracts and legal status of all family members. The format has indented text labels and the full country name as headings.
Guide to STN Patent Databases

**L1 ANSWER 1 OF 1** INPADOCDB COPYRIGHT 2008 EPO/FIZ KA on STN

**TITLE:** Ionizing bar and method of its fabrication.

**PATENT FAMILY INFORMATION**
AN 4865108 INPADOCDB

**-------- PUBLICATIONS --------**
DE 10031115 A1 200010125 DE 2000-10031115 A 20000626
JP 2001015655 A 20010119 JP 2001-189210 A 20000623
US 6137165 A 20000624 US 1999-344704 A 19990625
US 6300146 B1 20011009 US 2000-549260 A 20000414

**-------- APPLICATIONS --------**
US 1999-344704 A 19990625
US 2000-549280 A 20000414

**-------- PRIORITIES --------**
US 1999-344704 A 19990625
US 2000-549280 A 20000414

**| GERMANY FEDERAL REPUBLIC OF (DE) |**

**ACCESSION NUMBER:** 21118511 INPADOCDB

**TITLE:** Halbleiterbauteil sowie Verfahren zur Messung seiner Temperatur.

**TITLE LANGUAGE:** German

**INVENTOR(S):**
NON-STANDARD.: THIERRY, VINCENT
STANDARDIZED: THIERRY VINCENT, FR

**PATENT ASSIGNEE(S):**
NON-STANDARD.: INTERNATIONAL RECTIFIER CORP., EL SEGUNDO
STANDARDIZED: INT RECTIFIER CORP, US

**PATENT INFORMATION:**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>KIND</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE 10031115</td>
<td>A1</td>
<td>200010125</td>
</tr>
</tbody>
</table>

**PATENT INFO. TYPE:** DEA1 DOC. LAID OPEN (FIRST PUBLICATION)

**DATE OF AVAILABILITY:** 200010125 unexamined printed without grant

**PATENT STATUS:** PRE-GRA N T PUBLICATION

**APPLICATION INFO.:** DE 2000-10031115 A 20000626

**APPL. INFO. TYPE:** DEA Patent application

**PRIORITY APPL. INFO.:** US 1999-344704 A 19990625 (USA)

**PRIO. APPL. INFO. TYPE:** USA Patent application

**IPC VERSION(1-7):** 7

**INT. PATENT CLASSIF.:**

**MAIN:**
H01L0023-34 [1, A]; H03K0017-08 [N, A];
H03K0017-082 [I, A]

**SECONDARY:**
G01K0013-00; H01L0025-07; H01L0027-06; H03K0017-687

**IPC RECLASSIF. (ADV):**
H01L0023-34 [1, A]; H03K0017-08 [N, A];
H03K0017-082 [I, A]

**IPC RECLASSIF. (CORE):**
H01L0023-34 [1, A]; H03K0017-08 [N, A];
H03K0017-082 [I, A]

**EPC CLASSIF. (ECLA):**
H03K0017-082B

**ICO CLASSIF.:**
T03K0017-08T

**ABSTRACT (GERMAN):**

Search examples

We want to use the DFAM family display format. To use this format without unfavourable line breaks a minimum line length of 101 should be set.

DFAM shows the complete family (priority, application, publication details) and is sorted by the priority date. This is where we need the minimum line length of 101.

The line length should be reset to 80.

60.4 Search in DWPI

We want to use the DFAM family display format. To use this format without unfavourable line breaks a minimum line length of 101 should be set.

DFAM shows the complete family (priority, application, publication details) and is sorted by the priority date. This is where we need the minimum line length of 101.

The line length should be reset to 80.
The cross-referenced document is searched.

=> SEL CR
E1 THROUGH E1 ASSIGNED

=> S E1/AN
L3 1999-344704 19990625

=> D CR FAM

Sometimes the CR field is not filled. It is therefore a good idea to do an extended family search (see below).

60.5 Search in IFIPAT

=> FIL IFIPAT
FILE "IFIPAT" ENTERED
COPYRIGHT (C) 2008 IFI CLAIMS(R) Patent Services (IFI)

=> S US 6300146/PN
L3 1 US 6300146 /PN
    (US6300146/PN)

With regard to family information the FI and RLI fields are of particular interest.

=> D STD

L4 ANS WAR 1 OF 1 IFIPAT COPYRIGHT 2008 IFI on STN
AN 03586128 IFIPAT;IFIUDB;IFICDB
TI HYBRID PACKAGE INCLUDING A POWER MOSFET DIE AND A CONTROL AND PROTECTION CIRCUIT
DIE WITH A SMALLER SENSE MOSFET
IN Thierry Vincent (FR)
PA International Rectifier Corp (42928)
PI US 6300146 B1 20011009
AI US 2000-549280 20000414
RLI US 1999-344704 19990625 DIVISION 6137165
FI US 6300146 20011009
    US 6137165
DT Utility; CERTIFICATE OF CORRECTION
CDAT 6 May 2003
    27 May 2003
FS CHEMICAL
ED ENTERED STN: 11 Oct 2001
Last Updated on STN: 8 Jul 2002
INCL INCM: 438014000
INCLS: 438003000; 438005000; 438015000; 438017000; 438018000
NCL NCM: 438014000
NCLS: 438003000; 438005000; 438015000; 438017000; 438018000
IPC [3]
    ICM H03KX0017-082
    ICS H01L0021-66
    IPCI G01R0031-26
    H01L0021-66
60.6 Search in USPATFULL

The RLI field holds detailed information on the patent family.

60.7 Extended family search in DWPI

With FSEARCH the system uses every publication or application number to find more family members. The system automatically selects these numbers and searches for them until the number of records remains constant.
DISPLAY of the records retrieved. The FAM format contains the relevant number fields.

=> D 1-2 AN XR FAM

L5 ANSWER 1 OF 2 WPINDEX COPYRIGHT 2008 THE THOMSON CORP on STN FAMILY 1
AN 2002-235722 [29] WPINDEX
CR 2001-059644
PI US 6300146 B1 20011009 (200229)* EN 7[6]
20000414
FDT US 6300146 B1 Div ex US 6137165 A
PRAI US 2000-549280 20000414
US 1999-344704 19990625

L5 ANSWER 2 OF 2 WPINDEX COPYRIGHT 2008 THE THOMSON CORP on STN FAMILY 1
AN 2001-059644 [07] WPINDEX
CR 2002-235722
PI US 6137165 A 20001024 (200107)* EN 8[6]
DE 10031115 A1 20010125 (200107) DE
JP 2001015655 A 20010119 (200107) JA 32
20000623; DE 10031115 A1 DE 2000-10031115 20000626
PRAI US 1999-344704 19990625
61  Legal status search example

61.1  Example 1
We are interested in the current legal status of various members of the patent family of the US patent numbered 6,479,876.

Note: The patent databases with legal status information allow searching by publication or application number. Appropriate DISPLAY formats for the legal status are available.

The details available vary between the databases.

61.1.1  Search in INPADOCDB

=> FIL INPADOCDB
FILE 'INPADOCDB' ENTERED
COPYRIGHT (C) 2013 European Patent Office / FIZ Karlsruhe
SEARCH with the patent or application number. The legal status can be displayed e.g. by D MAX or D ALL LS or D LS (legal status field only).

=> S US6479876/PN
L1 1 US6479876/PN

If there is a patent family with few members it is more effective to use a family display format with legal status information for all members (if the full information is needed). LFAM or FFAM are possible. The IFAM format would have even more details (Indented Family Format)

=> D FFAM
L1 ANSWER 1 OF 1 INPADOCDB COPYRIGHT 2013 EPO/FIZ KA on STN

---------------
MEMBER 1
---------------
AN 21397282 INPADOCDB UP 20100701 UW 201028
FN 11575639
TI Vertical power MOSFET.
Vertikaler Leistungs-MOSFET.
TL English; German
IN TIHANYI, JENOE, DR.-ING., 85551 KIRCHHEIM, DE; DEBOY, GERALD, DR. RER. NAT., 82008 UNTERHACHING, DE
INS TIHANYI JENOE DR ING, DE; DEBOY GERALD DR RER NAT, DE
PA SIEMENS AG, 80333 MUENCHEN, DE
PAS SIEMENS AG, DE
DT Patent
PI DE 19730759 C1 19980903
PIT DEC1 PATENT SPECIFICATION (FIRST PUBL.) [FROM NO. 1400000 ONWARDS]
FDT DED1 Grant of a patent without 'OFFENLEGUNGSSCHRIFT'
DAV 19980903 printed with grant
STA GRANTED
AI DE 1997-19730759 A 19970717
AIT DEA Patent application
PRAI DE 1997-19730759 A 19970717 (DEA, 20080814, Y)
PRAIT DEA Patent application
XPD 20170717
REC 1. THERE IS 1 CITED REFERENCE (1 PATENT, 0 NON PATENT) AVAILABLE FOR THIS RECORD. ALL CITATIONS ARE AVAILABLE IN THE RE FORMAT.
IC V 6
ICM H01L0029-78
IPCR H01L0021-336 [I, A]; H01L0029-06 [I, A]; H01L0029-167 [I, A]; H01L0029-32 [I, A]; H01L0029-76 [I, A]; H01L0029-78 [I, A]; H01L0031-062 [I, A]
CPC H01L0029-0634; H01L0029-167; H01L0029-32; H01L0029-7802
Guide to STN Patent Databases

EPC H01L0029-78B2; H01L0029-06B2B83R2; H01L0029-167; H01L0029-32
FA AB; AI; AN; DAV; CGP; CPC; DT; EPC; ICM; IN; INS; IPC; IPCR; PA; PAS; PI; PI T; PRAI; REP; TI; XPD

LEGAL STATUS
AN 21397282 INPADOCDB
19980903 DED1 + GRANT (NO UNEXAMINED APPLICATION PUBLISHED) PATENT LAW 81
19980903 DE8100 + PUBLICATION OF THE EXAMINED APPLICATION WITHOUT PUBLICATION OF UNEXAMINED APPLICATION
19990304 DE8364 + NO OPPOSITION DURING TERM OF OPPOSITION

---------------
MEMBER 2
---------------
AN 23621185 INPADOCDB UP 20100701 UW 201028
FN 11575639
TI VERTIKALER LEISTUNGSMOSFET.
VERTICAL POWER MOSFET.
TRANSISTOR A EFFET DE CHAMP MOS VERTICAL DE PUISSANCE.
TL German; English; French
IN DEBOY, GERALD; TIHANYI, JENOE
INS DEBOY GERALD, DE; TIHANYI JENOE, DE
PA SIEMENS AKTIENGESELLSCHAFT
PAS SIEMENS AG, DE
DT Patent
PI EP 929910 A1 19990721 German
PIT EPA1 APPLICATION PUBLISHED WITH SEARCH REPORT
DAV 19990721 examined-printed-without-grant
STA PRE-GRANT PUBLICATION
DS R: DE FR GB IE IT
AI EP 1998-947303 A 19980717
AIT EPA Patent application
PRAI WO 1998-DE2020 W 19980717 (WOWW, 20080814, N)
DE 1997-19730759 A 1997070717 (DEA, 20080814, Y)
PRAIT WOWW Additional PCT application
DEA Patent application
REC 1. THERE IS 1 CITED REFERENCE [0 PATENT, 1 NON PATENT] AVAILABLE FOR THIS RECORD. ALL CITATIONS ARE AVAILABLE IN THE RE FORMAT.
IC.V 6
ICM H01L0029-78
ICS H01L0029-167; H01L0029-32
IPCR H01L0029-336 [I, A]; H01L0029-06 [I, A]; H01L0029-167 [I, A]; H01L0029-32 [I, A]; H01L0029-76 [I, A]; H01L0029-78 [I, A]; H01L0031-062 [I, A]
CPC H01L0029-0634; H01L0029-167; H01L0029-32; H01L0029-7802
EPC H01L0029-78B2; H01L0029-06B2B83R2; H01L0029-167; H01L0029-32
FA AI; AN; DAV; CPC; DS; DT; EPC; ICM; ICS; IN; INS; IPC; IPCR; LA; PA; PAS; PI; PI T; PRAI; REN; TI

LEGAL STATUS
AN 23621185 INPADOCDB
19990721 EPAK + DESIGNATED CONTRACTING STATES: EP A1 DE FR GB IE IT
19990721 EP17P + REQUEST FOR EXAMINATION FILED
19990305 EXA Examination, Search Report
20011114 EPRAP1 TRANSFER OF RIGHTS OF AN EP APPLICATION
INFINEON TECHNOLOGIES AG
CHG Change of Owner, Inventor, Applicant
20070815 EP17Q + FIRST EXAMINATION REPORT
20070717 EXA Examination, Search Report
20080528 EP18D - DEEMED TO BE WITHDRAWN
20071128 NIF Lapses, Expiries, Withdrawals, Refusals

466
AN 48835776 INPADOCDB UP 2000701 UW 201028
FN 11575639
TL English
IN DEBOY GERALD; TIHANYI J ENOE
INS DEBOY GERALD, DE; TIHANYI J ENOE, DE
PA DEBOY GERALD; TIHANYI J ENOE
DT Patent
PI US 6479876 B1 20021112
PT USB1 REEXAM. CERTIF., N-ND REEXAM. or GRANTED PATENT AS FIRST PUBLICATION [FROM 2001 ONWARDS]
DAV 20021112 printed-with-grant
STA GRANTED
AI US 2000-462759 A 20001012
AIT USA Patent application
PRAI DE 1997-19730759 A 19970717 (DEA, 20008014, Y)
WO 1998-DE2020 W 19980717 (WOWW, 20008014, N)
PRAIT DEA Patent application
WOWW Additional PCT application
XPD 20180717
REC 7. THERE ARE 7 CITED REFERENCES (7 PATENT, 0 NON PATENT) AVAILABLE FOR THIS RECORD. ALL CITATIONS ARE AVAILABLE IN THE RE FORMAT.
IC V 7
ICM H01L0029-76
ICS H01L0031-062
IPCR H01L0021-336 [I,A]; H01L0029-06 [I,A]; H01L0029-167 [I,A]; H01L0029-32 [I,A]; H01L0029-76 [I,A]; H01L0029-78 [I,A]; H01L0031-062 [I,A] CNBC H01L0029-0634; H01L0029-167; H01L0029-32; H01L0029-7802 EPC H01L0029-7882; H01L0029-0682883R2; H01L0029-167; H01L0029-32
NCL NCLM 257/401.000
NCLS 257/E29.086; 257/E29.107; 257/E29.257; 257/341.000; 257/392.000; 257/500.000
INCL I NCLM 257/401.000
INCLS 257/341.000; 257/392.000; 257/500.00000
FA AB; AI; AN; DAV; CGP; CPC; DT; EPC; ICM; ICS; IN; INS; IPC; IPCR; INCL; NCL; PA; PI; PIT; PRAI; REP; TI; XPD
LEGAL STATUS
AN 48835776 INPADOCDB
20001012 USAS ASSIGNMENT
ASSIGNMENT SIEMENS AKTIENGESELLSCHAFT, GERMANY ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS: DEBOY, GERALD; TIHANYI, J ENOE; REEL/FRAME: 011165/0961 19991230
CHG Change of Owner, Inventor, Applicant
20020715 USAS ASSIGNMENT
ASSIGNMENT INFINEON TECHNOLOGIES AG, GERMANY ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS: AKTIENGESELLSCHAFT, SIEMENS; REEL/FRAME: 013085/0518 20020701
CHG Change of Owner, Inventor, Applicant
20030603 USCC CERTIFICATE OF CORRECTION
20060505 USFPAY + FEE PAYMENT
20100507 USFPAY + FEE PAYMENT
AN 15054093 | INPADOCDB UP 20100701 UW 201028
FN 11575639
TI VERTIKALER LEISTUNGS-MOSFET.
       VERTICAL POWER MOSFET.
       TRANSISTOR A EFFET DE CHAMP MOS VERTICAL DE PUISSANCE.
TL German; English; French
IN DEBOY, GERALD; TIHANYI, JENOE
INS DEBOY GERALD, DE; TIHANYI JENOE, DE
PA SIEMENS AKTIENGESELLSCHAFT; DEBOY, GERALD; TIHANYI, JENOE
PAS SIEMENS AG, DE; DEBOY GERALD, DE; TIHANYI JENOE, DE
DT Patent
PI WO 9904437           A1 19990128
PI T WO 9904437 INTERNATIONAL APPLICATION PUBLISHED WITH INTERNATIONAL SEARCH REPORT
FD T WO 9904437 Before expiration of time limit for amending the claims and to be republished in the event of the receipt of the amendments
DAV 19990128 examined-printed-without-grant
STA PRE-GRA NT PUBLICATION
DS W: JP US
RW EP: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
AI WO 1998-DE2020 W 19980717 German
AI T WO international application Number
PRAI DE 1997-19730759 A 19970717 (DEA, 20080814, Y)
PRAIT DEA Patent application
REC 4. THERE ARE 4 CITED REFERENCES (4 PATENT, 0 NON PATENT) AVAILABLE FOR THIS RECORD. ALL CITATIONS ARE AVAILABLE IN THE RE FORMAT.
IC. V 6
IC S H01L0029-78
IPC R H01L0029-32, H01L0029-32
IPC R H01L0029-32 [I], H01L0029-76 [I], H01L0029-78 [I], H01L0031-062 [I]
CPC H01L0029-0634; H01L0029-167; H01L0029-32; H01L0029-7802
EPC H01L0029-7882; H01L0029-068283R2; H01L0029-167; H01L0029-32
FA AB; ABDE; ABFR; AI; AN; DAV; CGP; CPC; DS; DT; EPC; ICM; ICS; IN; INS; IPC; IPCR; LAF; PA; PAS; PI; PIT; PRAI; REP; TI
LEGAL STATUS
AN 15054093 | INPADOCDB
19990128 WOAK + DESIGNATED STATES
WO AI
19990128 WOAL + DESIGNATED COUNTRIES FOR REGIONAL PATENTS
WO AI
19990208 WOowe + WIPO INFORMATION: ENTRY INTO NATIONAL PHASE
EP 1998947303
19990315 WOENP ENTRY INTO THE NATIONAL PHASE IN:
JP 1999 506154 A F
19990506 WO121 EP: THE EPO HAS BEEN INFORMED BY WIPO THAT EP WAS DESIGNATED IN THIS APPLICATION
19990721 WOwwp + WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE
EP 1998947303
20001012 WOowe + WIPO INFORMATION: ENTRY INTO NATIONAL PHASE
US 09462759
20071128 WOwww - WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE
EP 1998947303
2 priorities, 5 applications, 6 publications (1 EPO simple family)
Guide to STN Patent Databases

61.1.2 Search in IFICLS

=> FIL IFICLS
FILE 'IFICLS' ENTERED
COPYRIGHT (C) 2013 IFI CLAIMS (R) Patent Services (IFI)
SEARCH by US patent number (there is no application number field in IFICLS).

=> S US6479876/PN
L2 1 US6479876/PN
(US6479876/PN)

The IALL (Indented ALL) format is used to get the full name of the fields.

=> D IALL
L2 ANSWER 1 OF 1 IFICLS COPYRIGHT 2013 IFI on STN

ACCESSION NO.: 3783993 IFICLS
PATENT ASSIGNEE: Deboy, Gerald DE
PATENT ASSIGNEE: Tihanyi, Jenoe DE
PATENT INFORMATION: US 6479876 20021112
DOCUMENT TYPE: REASSIGNED; CERTIFICATE OF CORRECTION
CORRECTION DATE: 24 Jun 2003
REASSIGNMENT INFO.: DATE: 20001012
KIND: ASSIGNMENT OF ASSIGNORS INTEREST
ASSIGNOR: DEBOY, GERALD DATE SIGNED: 12/30/1999; TIHANYI, JENOE
DATE SIGNED: 12/30/1999
ASSIGNEE: SIEMENS AKTIENGESELLSCHAFT MUNICH GERMANY
AGENT: IRWIN OSTROFF, ESQUIRE 3 LACKAWANNA BOULEVARD MURRAY HILL, NJ 07974
MICROFILM REEL NO: 011165
MICROFILM FRAME NO: 0961
DATE: 20020715
KIND: ASSIGNMENT OF ASSIGNORS INTEREST
ASSIGNOR: AKTIENGESELLSHAFT, SIEMENS DATE SIGNED: 07/01/2002
ASSIGNEE: INFINEON TECHNOLOGIES AG SANKT-MARTIN-STRABE 53 MUNICH GERMANY 81669
AGENT: IRWIN OSTROFF, ESQUIRE 3 LACKAWANNA BOULEVARD MURRAY HILL, NJ 07974
MICROFILM REEL NO: 013085
MICROFILM FRAME NO: 0518

61.1.3 Search in EPFULL

=> FIL EPFULL
FILE 'EPFULL' ENTERED
COPYRIGHT (C) 2013 European Patent Office / FIZ Karlsruhe / LexisNexis Univentio B.V.

=> S EP929910/PN
L3 1 EP929910/PN

The legal status from the European Patent Register is displayed with D LSEP. This legal status is searchable. The INPADOCDB legal status can be displayed in EPFULL and in other full-text databases.

=> D LSEP
L3 ANSWER 1 OF 1 EPFULL COPYRIGHT 2013 EPO/FIZ KA/LNU on STN

LEGAL STATUS INCLUDING HISTORY
AN 1998:60472 EPFULL
19990506 WO80066EP The EPO has been informed by WIPO that EP was designated in this application
19990506 W08870 PCT publication data
19990128
19990506 EP8840 Designated contracting states
Search examples

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
WO 9904437 A1 19990128
19990506 WO880 PCT, Publication of the international search report (A3 publication)
19990128
19990721 EPB241 Request for examination
19990305
19990721 EPB430 Unexamined document without grant, (first publication)
19990721
19990721 EPB840 Designated contracting states
DE FR GB IE IT
EP 929910 A1 19990721
20011114 EPB710R Applicant reassignment
OLD: SIEMENS AKTIENGESELLSCHAFT, Wittelsbacherplatz 2, 80333 Muenchen, DE
NEW: Infineon Technologies AG, Technologies AG, Infineon, St.-Martin-Strasse 53, 81669 Muenchen, DE
200111219 EPB740R Applicant reassignment
NEW: Patentanwaelte Westphal, Mussgnug & Partner, Mozartstrasse 8, 80336 Muenchen, DE
20070815 EPB242 Dispatch of the first examination report
20070816
20071205 EPB740R Agent reassignment
OLD: Patentanwaelte Westphal, Mussgnug & Partner, Mozartstrasse 8, 80336 Muenchen, DE
NEW: Patentanwaelte Westphal, Mussgnug & Partner, Herzog-Wilhelm-Str. 26, 80331 Muenchen, DE
20080528 EPB237 Application deemed withdrawn
20080528

61.2 Example 2

Has a US patent for the application published as US 2002/0106495 already been granted?

Notes: This search can most easily be accomplished in INPADOCDB, but rather than the legal status the STA field should be used where the status of the publication is registered. Another way is to search by the publications kind codes for granted patents. Note that these codes may vary between databases.

The search by publication kind code should be done in INPADOCDB or in another national or regional patent database where all publications are displayed in a single document (for US: USPATFULL, IFIPAT). DWPI or HCAPLUS should not be used with this strategy because in these databases it is possible that the number of the granted patent is entered into a different document of the patent family.

From Jan. 2, 2001, the relevant US publication kind codes are USB1 or USB2 in USPATFULL/IFIPAT and in INPADOCDB.

61.2.1 Search in INPADOCDB, USPATFULL and IFIALL

=> FIL INPADOCDB
FILE 'INPADOCDB' ENTERED
COPYRIGHT (C) 2013 European Patent Office / FIZ Karlsruhe

=> E A/STA
**** START OF FIELD ****
E3 0 --> A/STA
E4 35279038 GRANTED/STA
E5 40740032 PRE-GRANT PUBLICATION/STA
**** END OF FIELD ****

=> S US 2002106495/PN AND GRANTED/STA
L1 1 US 2002106495/PN AND GRANTED/STA

=> D PI.M
Multi file search by publication kind codes.

All potential codes can be covered with truncation. Other codes are not relevant together with this publication number of the US application.

In this multi file search the FROM option is used because of the different display formats in the individual databases.

61.3  Example 3

We are looking for oppositions against patents of GlaxoSmithKline and oppositions filed by GlaxoSmithKline in 2011.

Notes: INPADOCDB or EPFULL can be used to search for oppositions. Some patent offices even publish the opponent, e.g. the European Patent Office. The second part of the question can only be answered for publications of these offices.

61.3.1  Search in INPADOCDB (1)

Searching oppositions against patents of GlaxoSmithKline.

The legal status code ORE is used. This code is set with all Oppositions or Reexaminations (except where the text says: 'NO OPPOSITION')
Search examples

(L) proximity is used to get only documents where the same legal status entry contains both 'opposition' and '2007'.

=> S (GLAXO? OR SMITHKLINE?)/PA, PAS AND ORE/LSC2 (L) 2011/LSD
34812 GLAXO?/PA
35099 GLAXO?/PAS
36336 SMITHKLINE?/PA
36911 SMITHKLINE?/PAS
201997 ORE/LSC2
3671278 2011/LSD
(20110000-20119999/LSD)
9851 ORE/LSC2 (L) 2011/LSD
L1 21 (GLAXO? OR SMITHKLINE?)/PA, PAS AND ORE/LSC2 (L) 2011/LSD

=> D BIB HIT 5

L2 ANSWER 5 OF 21 INPADOCDB COPYRIGHT 2012 EPO/FIZ KA on STN

AN 52737667 INPADOCDB ED 20101216 EW 201050 UP 20101216 UW 201050
FN 8201841
TI IMPFSTOFFZUSAMMENSETZUNGEN MIT VIROSOMEN UND EINEM SAPONIN ADJUVANS.
VACCINE COMPOSITIONS COMPRISING VIROSOMES AND A SAPONIN ADJUVANT.
COMPOSITIONS DE VACCIN COMPRENANT DES VIROSOMES ET UN ADJUVANT A BASE
DE SAPONINE.
TL German; English; French
IN COLLER, BETH ANN; HENDERICKX, VERONIQUE; GARCON, NATHALIE M J.
NS COLLER BETH-ANN, BE; HENDERICKX VERONIQUE, BE; GARCON NATHALIE M J, BE
PA GLAXOSMITHKLINE BIOLOGICALS SA
PAS GLAXOSMITHKLINE BIOLOGICALS SA, BE
DT Patent
PI EP 1755666 B1 20101215 English
PT EPB1 PATENT SPECIFICATION
DAV 20101215 printed with grant
STA GRANTED
DS R: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR
XS R: HR LV
AI EP 2005-747432 A 20050526
AIT EPA Patent application
GB 2004-12039 A 20040528 (GBA, 20070301, Y)
GB 2004-12304 A 20040602 (GBA, 20070301, Y)
PRAIT WOWW Additional PCT application
GBA Patent application
PA GLAXOSMITHKLINE BIOLOGICALS SA
PAS GLAXOSMITHKLINE BIOLOGICALS SA, BE
PA GLAXOSMITHKLINE BIOLOGICALS SA
PAS GLAXOSMITHKLINE BIOLOGICALS SA, BE

LEGAL STATUS HIT
AN 52737667 INPADOCDB
20111019EP26 OPPOSITION FILED
CRUCELL HOLLAND B.V.
20110915
ORE Opposition, Reexamination
.................................................20111020

LEGAL STATUS HIT
AN 52737667 INPADOCDB
20111026EP26 OPPOSITION FILED
STRAWMAN LIMITED
20110915
ORE Opposition, Reexamination
.................................................20111027

With European patents also the Opponent is named.
We now want to get a list of Opponents.

=> ANALY L1 1- LSOP
L3 ANALYZE L1 1- LSOP : 17 TERMS
Guide to STN Patent Databases

=> D 1.-
L3  ANALYZE L1 L3 LSOP :  17 TERMS
TERM #   # OCC  # DOC  % DOC LSOP
-------  ------  ------  --------  --------
1        5      2   9.52 NORTON HEALTHCARE LIMITED
2        4      1   4.76 TEVA PHARMACEUTICAL INDUSTRIES LTD.
3        3      2   9.52 NOVARTIS VACCINES AND DIAGNOSTICS, INC.
4        3      1   4.76 GEDEON RICHTER PLC.
5        3      1   4.76 MICROMET AG
6        2      1   4.76 CHIRON CORPORATION
7        2      1   4.76 FRIESLAND BRANDS B.V.
8        1      1   4.76 BAYER PHARMA AKTIENGESELLSCHAFT
9        1      1   4.76 BOCK WOLFGANG
10       1      1   4.76 CRUCELL HOLLAND B.V.
11       1      1   4.76 NOVARTIS AG
12       1      1   4.76 SANOFI PASTEUR, INC.
13       1      1   4.76 SCHERING AKTIENGESELLSCHAFT
14       1      1   4.76 STRAWMAN LIMITED
15       1      1   4.76 TASMANIAN ALKALOIDS PTY. LTD.
16       1      1   4.76 THE KINGDOM OF THE NETHERLANDS, REPRESENTED BY THE
17       1      1   4.76 VON MENGES, ALBRECHT

********** END OF L3 **********

61.3.2  Search in INPADOCDB (2)

Search for oppositions (against European Patents) by GlaxoSmithKline. The LSOP field (Legal Status Patent Opponent) is used.

=> S (GLAXO? OR SMITHKLINE?)/LSOP (L)2011/LSD
   116 GLAXO?/LSOP
   70 SMITHKLINE?/LSOP
   3671278 2011/LSD  (20110000-20119999/LSD)
L4 15 (GLAXO? OR SMITHKLINE?)/LSOP (L)2011/LSD

=> D PA HIT
L4 ANSWER 1 OF 15  INPADOCDB COPYRIGHT 2012 EPO/FIZ KA on STN
PA EXONHIT THERAPEUTICS SA
LEGAL STATUS HIT
AN 57172616 INPADOCDB
20110615EP26 - OPPOSITION FILED
   GLAXO GROUP LIMITED
   20110504
ORE Opposition, Reexamination
...........................................20110616

Now GLAXO is the Opponent. This is a list of patent assignees against whose patents GLAXO has opposed.

=> ANAL L3 1- PAS
L5  ANALYZE L4 L5 PAS :  13 TERMS

=> D 1.-
L5  ANALYZE L4 L5 PAS :  13 TERMS
Search examples

11 1 1 6.67 MAX PLANCK GESELLSCHAFT
12 1 1 6.67 PROTEIN DESIGN LABS INC
13 1 1 6.67 WANG LI HONG

******* END OF L5 *******

61.4  Example 4

Search of European patents where the company BIOSENSOR ENTREPRISES is licensee.

=> FIL EPFULL
FILE 'EPFULL' ENTERED
COPYRIGHT (C) 2012 European Patent Office / FIZ Karlsruhe / LexisNexis Univentio B.V.

=> E BIOSENSOR/LI
E1 6 BIOSCIENCE/LI
E2 7 BIOSCIENCES/LI
E3 17 ... BIOSENSOR/LI
E4 1 BIOSENSOR ENTERPRISES LLC/LI
E5 16 BIOSENSOR ENTERPRISES LLC/LI
E6 1 BIOSPHERICS/LI
E7 1 BIOSPHERICS INCORPORATED/LI

=> S E3
L6 17 BIOSENSOR/LI

Selecting those patent assignees where BIOSENSOR ENTREPRISES appears as licensee.

=> SEL 1- PA
E1 THROUGH E3 ASSIGNED

=> D SEL
E1 14 AMBRI LIMITED/PA
E2 3 AUSTRALIAN MEMBRANE AND BIOTECHNOLOGY RESEARCH INSTITUTE/PA
E3 2 THE UNIVERSITY OF SYDNEY/PA

Display of the first document with full address details.

=> D 1 TI PI PA HIT
L6 ANSWER 1 OF 17 EFPULL COPYRIGHT 2012 EPO/FIZ KA/LNU on STN
TIEN Improved sensor membranes.
TIFR Membranes ameliorées pour les capteurs.
TIDE Verbesserte Sensormembranen.
PI EP 1130388 A1 20010905
PA Ambri Limited, 126 Greville Street, Chatswood, NSW 2067, AU
LI 0100 20030825 Exclusive licence
Biosensor Enterprises, LLC, 925 Page Mill Road, Palo Alto, California 94304, US
8700 for AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

61.5  Example 5

We are interested in the current legal status, and in particular the expiration dates, of patents on the substance ZOLEDRONATE and their family members. US 4,939,130 is a US family member, EP 0 275 821 is a European family member, the German application number for the designation is DE 37 76 880.

Notes: The data of the individual family members can be found in the databases with legal status information (incl. SPC – Supplementary Protection Certificates) (IFICLS, PATDPA) and the data for the full family can be found in INPADOCDB. The IMSPATENTS and PATDPASPC databases offer the option to search not only by patent number but also by substance. In IMSPATENTS very comfortable display formats exist to display the information for the substance in tabular format. The tables even include additional comments on individual countries.
Guide to STN Patent Databases

61.5.1 Search in IFICLS

=> FIL IFICLS
FILE 'IFICLS' ENTERED
COPYRIGHT (C) 2012 IFI CLAIMS(R) Patent Services (IFI)

=> S US4939130/PN
L1 1 US4939130/PN

=> D IALL
L1 ANSWER 1 OF 1 IFICLS COPYRIGHT 2012 IFI on STN

ACCESSION NO.: 2060296 IFICLS
PATENT ASSIGNEE: Ciba-Geigy Corp
PATENT INFORMATION: US 4939130 19900703
DOCUMENT TYPE: REASSIGNED; EXTENDED

The new expiration date for US is 2 Sept., 2012. The trade name is ZOMETA.

EXTENDED INFO.: DATE: 20060209 DESC: (1,157 days (O.G. Issue Date
Unavailable - Used FDA Certificate Date)) ORG DATE: 20060209
ORIG. EXPIRATION DATE: 20071113, NEW EXPIRATION DATE:
20120902
TRADE NAME: ZOMETA
REASSIGNMENT INFO.: DATE: 19900214
KIND: ASSIGNMENT OF ASSIGNORS INTEREST.
ASSIGNOR: JAEGGI, KNUT A., DATE SIGNED: 02/22/1989 WIDLER, LEO,
DATE SIGNED: 02/22/1989
ASSIGNEE: CIBA-GEIGY CORPORATION, A CORP. OF NY, 444 SAW MILL RIVER
ROAD, ARDSLEY, NY, 10502
AGENT: KARL F. JORDA, 444, SAW MILL RIVER RD., ARDSLEY, NY 10502
MICROFILM REEL NO: 005228
MICROFILM FRAME NO: 0929

DATE: 20000822
KIND: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).
ASSIGNOR: CIBA-GEIGY CORPORATION, DATE SIGNED: 06/12/1997
ASSIGNEE: NOVARTIS CORPORATION, 608 FIFTH AVENUE, NEW YORK, NY,
10020
AGENT: THOMAS HOXIE, 564 MORRIS AVENUE, SUMMIT, NJ 07901-1027
MICROFILM REEL NO: 011089
MICROFILM FRAME NO: 0648

DATE: 20110519
KIND: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).
ASSIGNOR: NOVARTIS CORPORATION, DATE SIGNED: 05/01/2011
ASSIGNEE: NOVARTIS PHARMACEUTICALS CORPORATION, ONE HEALTH PLAZA,
EAST HANOVER, NJ, 07936
AGENT: LINDA ADAMS, NOVARTIS PHARMACEUTICALS CORP., ONE HEALTH
PLAZA, EAST HANOVER, NJ 07936
MICROFILM REEL NO: 026305
MICROFILM FRAME NO: 0494

61.5.2 Search in IFIPAT

=> FIL IFIALL
FILE 'IFIALL' ENTERED
COPYRIGHT (C) 2013 IFI CLAIMS(R) Patent Services (IFI)

=> S US4939130/PN
L3 1 US4939130/PN

The XPD (Expiration Date) field in IFIALL usually contains the computed 'normal expiration date'. In this case the extension of the expiration date is shown.
Search examples

=> D BIB

L3 ANSWER 1 OF 1 Copyright 2013 IFI on STN
AN 02060296 Copyright 2013 IFI on STN
TI Substituted alkanediolphosphonic acids and pharmaceutical use
INF Jaeggi, Knut A, Basel, CH
Widler, Leo, Muchenstein, CH
IN Widler Leo (CH); Jaeggi Knut A (CH)
PAF Ciba-Geigy Corporation, Ardsley, NY
PA Ciba-Geigy Corp (2)
EXNAM Raymond, Richard L
AG Villamizar, JoAnn
PL US 4939130 A 19900703 (CITED IN 035 LATER PATENTS)
AI US 1989-315962 19890227 (7)
XPD 2 Sep 2012
RLI US 1987-120284 19871113 CONTINUATION-IN-PART ABANDONED
PRAI CH 1986-4666 19861121
FI US 4939130 19900703
DT Utility; Reassigned; Extended
FS CHEMICAL
GRANTED
OS CA 114:62355
ED Entered STN: 4 Dec 1992
Last Updated on STN: Jan 2011
MRN 005228 MFN: 0929
011089 0648
CLMN 5

61.5.3 Search in PATDPASPC

=> FILE PATDPASPC
FILE 'PATDPASPC' ENTERED
COPYRIGHT (C) 2012 Deutsches Patent- und Markenamt / FIZ Karlsruhe (DPMA/FIZ KA)

=> S ZOLEDRONATE/CN
L4 2 ZOLEDRONATE / CN

PATDPASPC contains the expiration date for German SPCs.

=> D MAX

L4 ANSWER 1 OF 2 PATDPASPC Copyright 2012 DPMA/FIZ KA on STN
AN 889 PATDPASPC
SPC.DN DE 10199052
SPC.TYP medicinal

SPC.TERM 20071117-20121116
SPC.GD 20040928
SPC.AD 20010919
SPC.DA EU-1-01-176-01; EU-1-01-176-02; EU-1-01-176-03; EU EWR Liechtenstein IKS 55463 01
EXF 1.43
PI DE 3776880
AD 19871116
IPC C07F009-65 (4)
C07F009-547 (5)
C07F009-547 (6)
C07F009-547 (7)
IT Certified Compound(s)
RN.CEC 118072-93-8
CN.CEC Zoledronate

RN.CEC 118072-93-8
CN.CEC Zoledronic acid

The term of the SPC is 17 Nov., 2007 to 16 Nov., 2012.
Guide to STN Patent Databases

RN.CEC  118072-93-8
CN.CEC  Zoledronsäure
RN.CEC  118072-93-8
CN.CEC  Zometa

Other Compound(s)
RN.OC  165800-06-6
CN.OC  Zoledronat
RN.OC  165800-06-6
CN.OC  Zoledronic acid hydrate
RN.OC  165800-06-6
CN.OC  Zoledrionsäurehydrat
RN.OC  165800-06-6
CN.OC  Zoledrionsäuremonohydrat

TN  Zometa; Zometa Pulver und Lösungsmittel zur Herstellung einer Infusionslösung

LS  Zoledronsäure
REQ  Zoledrionsäuremonohydrat
GRA  Zoledronsäure

The extension of the term by the Pediatric Extension is: 17 Nov., 2012 to 16 May, 2013.

NTE  Laufzeitverlängerung von 17.11.2012 bis 16.05.2013;
Laufzeitverlängerung um 6 Monate beantragt am 26.02.2010;
Laufzeitverlängerung erteilt am 27.05.2010

These are the details of a later application.

L4  ANSWER 2 OF 2  PATDPASPC COPYRIGHT 2012 DPMA/FIZ KA on STN

AN  887  PATDPASPC
SPC.DN  DE 10199050
SPC.TYP  medicinal
SPC.TERM  20070726-20120725
SPC.GD  20040928
SPC.AD  20010914
SPC.DA  EU-1-01-176-001; EU-1-01-176-002; EU-1-01-176-003; EU-EWR
Liechtenstein IKS-Nr. 55 463 01
EXF  1.43
PI  DE 3778800
EP 258618
AD  19870725
IPC  C07F009-65 (4)
C07F009-6503 (5)
C07F009-6503 (6)
C07F009-6503 (7)

IT  Certified Compound(s)
RN.CEC  118072-93-8
CN.CEC  Zoledronate
RN.CEC  118072-93-8
CN.CEC  Zoledronic acid
RN.CEC  118072-93-8
CN.CEC  Zoledronsäure
RN.CEC  118072-93-8
CN.CEC  Zometa
RN.CEC  165800-06-6
Search examples

| CN.CEC | Zoledronat |
| RN.CEC | 165800-06-6 |
| CN.CEC | Zoledronic acid hydrate |
| RN.CEC | 165800-06-6 |
| CN.CEC | Zoledronsaurehydrat |
| RN.CEC | 165800-06-6 |
| CN.CEC | Zoledronsauremonohydrat |

TN: Zometa; Zometa Pulver und Lösungsmittel zur Herstellung einer Infusionslösung

LS
APP: Zoledronsauremonohydrat
REQ: Zoledronsaure
GRA: Zoledronsaure; Salze
SPC.TYP: medicinal

=> SEL 1 PN
E1 THROUGH E2 ASSIGNED

=> D SEL
E1 1 DE3776880/PN
E2 1 EP275821/PN

PATDPASPC does not include the legal status of the patent.

61.5.4 Search in PATDPA

=> FIL PATDPA
FILE 'PATDPA' ENTERED
COPYRIGHT (c) 2012 Deutsches Patent- und Markenamt / FIZ Karlsruhe (DPMA/FIZ KA)

=> S E1-E4
L6 1 (DE3776880/PN OR EP275821/PN)

In Germany, an SPC has been granted for the European Patent EP 0275821.

=> D 1-4 TI PA PI AI PRAI NTE SPC

In Germany, an SPC has been granted for the European Patent EP 0275821.

SPC: Sonstiges (Arzneimittel Zertifikat)
DE10199052.9 20020110 (DE3776880)
IPC: C07F0009-547
Vertreter und Zustellanschrift geändert in: Kroher - Strobel Rechts- und Patentanwälte, Bavariaring 20, 80336 München

SPC: Sonstiges (Arzneimittel Zertifikat)
DE10199052.9 20100121 (DE3776880)
IPC: C07F0009-547
Vertreter und Zustellanschrift geändert in: Kroher - Strobel Rechts- und Patentanwälte, Bavariaring 20, 80336 München
Die Laufzeit des Schutzzertifikats wurde gemäß Artikel 13 Absatz 3 der EG-Verordnung Nr. 469/2009 verlängert.

**61.5.5 Search in INPADOCDB/INPAFAMDB**

In INPAFAMDB the full patent family can be displayed, including the SPCs in the individual countries and expiration details. The deduplicated format including the legal status or a full format with details of every individual patent and its legal status may be used.

Display of the deduplicated format (Brief) and legal status of the full family in chronological order.

**PATENT FAMILY INFORMATION INPAFAMDB**

Alkanediphosphonic acids, in particular heteroarylalkanediphosphonic acids of formula $<\text{IMAGE}>$ (I), wherein $R_1$ is a 5-membered heteroaryl radical which may be fused with benzene or cyclohexene nuclei and which contains, as hetero atoms, 2 to 4 N-atoms or 1 or 2 N-atoms as well as 1...
Guide to STN Patent Databases

DE 1987-10199052 C 19871116

19871116 EPA APP Patent application
19871116 EST APP Translation
19871116 ILA APP Patent application

... 20010531 EPRG REFERENCE TO A NATIONAL CODE

CHSPCF CH: SUPPLEMENTARY PROTECTION CERTIFICATE FILED

SPC Suppl. Protect. Certificate, Time Extension

20010802 AUNC EXTENSION OF TERM REQUESTED FOR STANDARD PATENT (SECT. 70)

PRODUCT NAME: ZOMETA ZOLEDRONIC ACID

SPC Suppl. Protect. Certificate, Time Extension

.......................................20070628

20040828 DEV484 DELIVERY OF THE DECISION OF GRANT

PRODUCT NAME: ZOLEDRONSAEURE; REGISTRATION NO/DATE:
EU/1/01/176/01 - EU/1/01/176/03; 20010320
101 99 052
20010919

SPC Suppl. Protect. Certificate, Time Extension

.......................................20100715

20040831 FIFG PATENT GRANTED

PRODUCT NAME: ZOLEDRONIC ACID; NAT REG. NO/DATE:
EU/1/01/176/001 - 003 20010320; FIRST REG.: N 55 463
20001128
01C0035

SPC Suppl. Protect. Certificate, Time Extension

.......................................20070405

... The Pediatric Extensions are included.

20110914 FISPCP APPLICATION FOR A SIX MONTH EXTENSION OF AN SPC

PRODUCT NAME: ZOLEDRONSAEURE UND DEREN SALZE UND HYDRATE;
REG.NO/DATE: EU/1/01/176/001 - 003 20010320; FIRST REG.: N 55 463
20001128
01C0035

SPC Suppl. Protect. Certificate, Time Extension

.......................................20111103

20110930 EPRG REFERENCE TO A NATIONAL CODE

FR CL: CONCESSION TO GRANT LICENSES

PRODUCT NAME: ZOLEDRONIC ACID; NAT REG. NO/DATE:
EU/1/01/176/001 - 003 20010320; FIRST REG.: N 55 463
20001128
01C0035

SPC Suppl. Protect. Certificate, Time Extension

.......................................20111027

3 priorities, 29 applications, 45 publications
If only the legal status details of one country are wanted the display in INPADOCDB is clearer.

61.5.6 Search in IMSPATENTS

First REGISTRY is used to find relevant terms for the substance.
Guide to STN Patent Databases

=> S ZOLEDRONATE/CN
L10 1 ZOLEDRONATE/CN

=> SEL NAME
E1 THROUGH E12 ASSIGNED

=> D SEL E5-
E1 1 (1-HYDROXY-2-MI DAZOL-1-YLETHYLIDENE)DIPHOSPHONIC ACID/B
E2 1 ACLASTA/B
E3 1 BPH 91/B
E4 1 CGP 42446/B
E5 1 ORAZOL/B
E6 1 RECLAST/B
E7 1 ZOL 446/B
E8 1 ZOLEDRONATE/B
E9 1 ZOLEDRONATE/B
E10 1 ZOMETA/B
E11 1 (1-HYDROXY-2-(1H-MI DAZOL-1-YL)ETHYLIDENE)1,1-BISPHOSPHONIC ACID/B
E12 1 2-(1H-MI DAZOL-1-YL)-1-HYDROXY-1,1'-ETHYLIDENEDI BISPHOSPHONIC ACID/B

=> FIL IMSPATENTS
FILE 'IMSPATENTS' ENTERED
COPYRIGHT (C) 2012 IMSWORLD Publications Ltd.

Chemical names are searchable in the CN field in IMSPATENTS.

=> S E1-E12/CN
L11 139 (1-HYDROXY-2-MI DAZOL-1-YLETHYLIDENE)DIPHOSPHONIC ACID/CN OR ACLASTA/CN OR BPH 91/CN OR CGP 42446/CN OR ORAZOL/CN OR RECLAST/CN OR ZOLEDRONATE/CN OR ZOLEDRONATE/CN OR ZOLEDRONATE/CN OR ZOLEDRONATE/CN OR ZOLEDRONATE/CN

Depending on what information is required this answer set is limited: in this case to all US patents.

=> S L11 AND US/PC
L12 12407 US/PC

The search result can now be displayed in easy-to-read tabular formats.

CYTAB: PC, PN, AP, expiry date, expiry comments, country comments

=> D 1- CYTAB
L12 File IMSPATENTS COPYRIGHT 2012 IMSWORLD

<table>
<thead>
<tr>
<th>ANS</th>
<th>Country</th>
<th>Publication Number(s)</th>
<th>Expiry Date</th>
<th>Expiry Comments</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>United States</td>
<td>US 20070015736</td>
<td>20280805</td>
<td>Granted (2011); Pediatric Extension Granted for RECLAST</td>
<td>(1), (2), (3), (4), (5), (6), (7), (8), (9), (10), (11), (12), (13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 7932241</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>United States</td>
<td>US 20030181421</td>
<td>20231027</td>
<td>Granted (2011)</td>
<td>(14), (15), (16),</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 8052987</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Search examples

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Country Comments:

1. **Country Comments**: US patent US7932241 claims a pharmaceutical composition comprising:
   - a heat sterilizable container having an internal surface that comprises a plastic material; and
   - a ready-to-use solution disposed in the container, the solution comprising zoledronic acid or a pharmacologically acceptable salt.
   - The product is in unit dose form having a volume of about 20 ml up to about 500 ml.

2. The term of US patent US7932241 has been extended/adjusted by 1236 days under 35 U.S.C.154(b). As a result the estimated expiry date of US patent US7932241 has been reset to 5 February 2028 from 17 September 2024.

3. A pediatric extension of 6 months has also been granted in the USA for US patent US7932241. The new expiry date is 5 August 2028 from 5 February 2028. The extension relates to the RECLAST formulation of zoledronic acid.

4. US patent US7932241 is quoted by the FDA Orange Book as relating to the RECLAST injectable IV (infusion) formulation of zoledronic acid. The applicant is Novartis.

5. US marketing exclusivity for zoledronic acid as a new chemical entity expired on 20 August 2006.

6. US marketing exclusivity for the RECLAST formulation of zoledronic acid as a new product expired 16 October 2010 (16 April 2010 plus 6-month pediatric extension).

7. US marketing exclusivity for the use of the RECLAST formulation of zoledronic acid to treat osteoporosis in postmenopausal women expired on 17 February 2011 (17 August 2010 plus 6-month pediatric extension).

8. US marketing exclusivity for the RECLAST formulation of zoledronic acid for use as treatment to increase bone mass in men with osteoporosis expires on 19 December 2011.

9. US marketing exclusivity for the RECLAST formulation of zoledronic acid for the treatment and prevention of glucocorticoid-induced osteoporosis in patients expected to be on glucocorticoids for at least 12 months expires on 15 March 2012.

10. US marketing exclusivity for the RECLAST formulation of zoledronic acid as a prevention of osteoporosis in postmenopausal women expires on 29 May 2012.

11. **Country Comments**: US patent US8052987 is based on WO0197788 and claims the use of zoledronic acid, its salt, or its hydrate for the treatment of conditions of abnormally increased bone turnover, comprising IV administration once per year.

12. The term of US patent US8052987 has been extended/adjusted by 861 days.
under 35 U.S.C. 154(b). As a result the estimated expiry date of US patent US8052987 has been reset to 27 October 2023 from 18 June 2021.

(16) US patent US8052987 is quoted by the FDA Orange Book as relating to the RECLAST iv infusion formulation of zoledronic acid for the treatment and prevention of postmenopausal or glucocorticoid-induced osteoporosis and treatment to increase bone mass in men with osteoporosis. The applicant is Novartis.

(17) The FDA Orange Book appears to misquote the expiry date of US patent US8052987 as being 19 March 2024. The source of this date is unclear.


(19) On 8 June 1995 the amendments to the US patent law under the General Agreement on Tariffs and Trade (GATT) came into force. As a result the estimated expiry date of US patent US4777163 has been reset to 24 July 2007 from 11 October 2005.

(20) US patent US4777163 was quoted by the FDA Orange Book as relating to the ZOMETA injectable formulation of zoledronic acid. This patent has since been delisted.

(21) US marketing exclusivity for the ZOMETA formulation of zoledronic acid relating to treatment of multiple myeloma and documented bone metastases from solid tumors, in conjunction with standard antineoplastic therapy expired on 22 February 2005.

(22) US orphan drug exclusivity for the ZOMETA formulation of zoledronic acid expired on 20 August 2008.


(24) On 8 June 1995 the amendments to the US patent law under the General Agreement on Tariffs and Trade (GATT) came into force. As a result the estimated expiry date of US patent US4939130 has been reset to 13 November 2007 from 3 July 2007.

(25) The term of US patent US4939130 has been extended by 1755 days under the Waxman-Hatch provisions. As a result the estimated expiry date has been reset to 2 September 2012 from 13 November 2007. The extension relates to the ZOMETA formulation of zoledronic acid. The applicant is Novartis.

(26) A pediatric extension of 6 months has been granted in the USA for US patent US4939130. The new expiry date is 2 March 2013 from 2 September 2012. The extension relates to the ZOMETA and RECLAST formulations of zoledronic acid.

(27) US patent US4939130 is quoted by the FDA Orange Book as relating to the ZOMETA intravenous infusion injectable formulations of zoledronic acid for treating hypercalcemia of malignancy and the RECLAST intravenous infusion formulation of zoledronic acid for treatment of osteoporosis in postmenopausal women. The applicant is Novartis.

(28) US orphan drug exclusivity for the ZOMETA formulations of zoledronic acid for the treatment of hypercalcemia of malignancy expired on 20 February 2009 (20 August 2008 plus 6-month pediatric extension).

(29) US marketing exclusivity for the ZOMETA formulations of zoledronic acid relating to labeling revisions based on data submitted in response to a pediatric written request, expires on 20 September 2011 (20 March 2011 plus 6-month pediatric extension).

COTAB: PA, CN, PN

<table>
<thead>
<tr>
<th>ANS</th>
<th>Patent Assignee</th>
<th>Compound</th>
<th>Publication Number(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Novartis (Algeria)</td>
<td>zoledronate</td>
<td>US 20070015736</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Novartis (Algeria)</td>
<td>zoledronate</td>
<td>US 20030181421</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Boehringer Mannheim (Germany)</td>
<td>zoledronate</td>
<td>US 4777163</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ciba Geigy (Switzerland)</td>
<td>zoledronate</td>
<td>US 4939130</td>
</tr>
</tbody>
</table>
Here we display additional information on the base patent.

**# Chemical Structure**

![Chemical Structure](attachment:image.png)

**# Additional Information**

- **Generic Name:** zoledronate; zoledronic acid
- **Lab Code:** CGP 42446; ZOL 446
- **Trade Name:** ACLASTA; RECLAST; ZOMETA
- **[1-hydroxy-2-(1H-imidazol-1-yl)-ethylidene]bisphosphonic acid**
- **Derivative(s):** 118072-93-8 zoledronic acid, 131654-46-1 disodium salt, 118072-93-8 zoledronic acid, 131654-46-1 disodium salt, 157432-58-1 zinc salt, 157432-59-2 magnesium salt
- **CC** L1X9 All Other Antineoplastics; M5B3 Bisphosphonates For Osteoporosis And Related Disorders; M5B4 Bisphosphonates For Tumour-related Calcium Disorders
- **CT** Indication: breast cancer; cancer; fracture; hypercalcemia; metastasis; osteoporosis; Paget disease; solid tumor
- **Pharmacology:** bone anabolic; bisphosphonate
- **HDP** Marketed (80)
- **PA** Ciba Geigy (Switzerland)
- **CO** Novartis (Switzerland)
- **Product**

On 8 June 1995 the amendments to the US patent law under the General Agreement on Tariffs and Trade (GATT) came into force. As a result the estimated expiry date of US patent US4939130 was reset to 13 November 2007 from 3 July 2007.

The term of US patent US4939130 has been extended by 1755 days under the Waxman-Hatch provisions. As a result the estimated expiry date has been reset to 2 September 2012 from 13 November 2007. The extension relates to the ZOMETA formulation of zoledronic acid. The applicant is Novartis.

A pediatric extension of 6 months has been granted in the USA for US patent US4939130. The new expiry date is 2 March 2013 from 2 September 2012. The extension relates to the ZOMETA and RECLAST formulations of zoledronic acid.

US patent US4939130 is quoted by the FDA Orange Book as relating to the ZOMETA intravenous infusion injectable formulations of zoledronic acid for the treatment of hypercalcemia of malignancy and the RECLAST intravenous infusion formulation of zoledronic acid for the treatment of osteoporosis in postmenopausal women. The applicant is Novartis.

US marketing exclusivity for zoledronic acid as a new chemical entity expired on 20 August 2006.

US orphan drug exclusivity for the ZOMETA formulations of zoledronic acid for the treatment of hypercalcemia of malignancy expired on 20 February 2009 (20 August 2008 plus 6-month pediatric extension).

US marketing exclusivity for the ZOMETA formulations of zoledronic acid relating to labeling revisions based on data submitted in response to a pediatric written request, expires on 20 September 2011 (20 March 2011 plus 6-month pediatric extension).

US marketing exclusivity for the RECLAST formulation of zoledronic acid as a new product expired 16 October 2010 (16 April 2010 plus 6-month pediatric extension).

US marketing exclusivity for the use of the RECLAST formulation of zoledronic acid to treat osteoporosis in postmenopausal women expired on 17 February 2011 (17 August 2010 plus 6-month pediatric extension).

US marketing exclusivity for the RECLAST formulation of zoledronic acid for use as treatment to increase bone mass in men with osteoporosis expires on 19 December 2011.

US marketing exclusivity for the RECLAST formulation of zoledronic acid for the treatment and prevention of glucocorticoid-induced osteoporosis in patients expected to be on glucocorticoids for at least 12 months expires on 13 March 2012.

US marketing exclusivity for the RECLAST formulation of zoledronic acid as a prevention of osteoporosis in postmenopausal women expires on 29 May 2012.

The patent family listed here claims zoledronic acid specifically and relates to the ZOMETA, ZOMETA CONCENTRATE, RECLAST and ACLASTA formulations of zoledronic acid.
62 Citation search example

62.1 Example 1
We are looking for cited and citing patents for EP patent numbered 1964 269.

This search is shown in the citation databases DPCI and INPAFAMDB.

62.1.1 Search in DPCI

=> FIL DPCI
FILE 'DPCI' ENTERED
COPYRIGHT (C) 2013 THOMSON REUTERS

Search for the patent number in the /PN field.

=> S EP 1964269 /PN
L1 1 EP 1964269 /PN
(EP1964269/PN)

We use the TRIAL format to check if this is the right document.
We also display the Counter Fields (CTCS, non-billable) to see if there are citations (e.g. Citing Patents) in the document.

=> D TRIAL CTCS

L1 ANSWER 1 OF 1 DPCI COPYRIGHT 2013 THOMSON REUTERS on STN
AN 2007-813214 [200776] DPCI
TI Closed loop frequency control circuit for wireless communication devic

CTCS CITATION COUNTERS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PNC.D</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.DI</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.DX</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.DO</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.DTH</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.DUN</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.D</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.DI</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.DX</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.DO</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.DTH</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.DUN</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.G</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.GI</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.GX</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.GO</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.GTH</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNC.GUN</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.G</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.GI</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.GX</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.GO</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.GTH</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAC.GUN</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRC</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRC.I</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRC.X</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRC.O</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRC.TH</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRC.UN</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSC.D</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSC.DX</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSC.DO</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The citation fields to be displayed can be limited to those where there actually are data, based on what we have found in the CTCS field. Display of the CDP, REN and CGP fields is more cost-effective than the full record.

These are the cited patents and non-patent literature and patents citing EP1 964 269.

=> D CDP REN CGP

L1 ANSWER 1 OF 1 DPCI COPYRIGHT 2013 THOMSON REUTERS on STN

CDP Citing Patents

<table>
<thead>
<tr>
<th>Citing Publication</th>
<th>By</th>
<th>Cat</th>
<th>Cited Patent</th>
<th>Date</th>
<th>Accession Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PA:</td>
<td></td>
<td>(LOCW-I) LO C W; (LUON-I) LUONG H C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN:</td>
<td></td>
<td>LO C W; LUONG H C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PA:</td>
<td></td>
<td>(LOCW-I) LO C W; (LUON-I) LUONG H C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN:</td>
<td></td>
<td>LO C W; LUONG H C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>US 6281758 B1 20010828 2001-569972</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PA:</td>
<td></td>
<td>(CONX-C) CONEXANT SYSTEMS INC</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN:</td>
<td></td>
<td>ALI A; ELSAYED A M</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PA:</td>
<td></td>
<td>(ATML-C) ATMEL GERMANY GMBH</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN:</td>
<td></td>
<td>SCHWARZMUELLER M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>WO 2005025069 A1 20050317 2005-272926</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PA:</td>
<td></td>
<td>(XEMI-N) XEMICS SA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IN:</td>
<td></td>
<td>VANDEL E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REN Literature Citations

<table>
<thead>
<tr>
<th>Citing Publication</th>
<th>By</th>
<th>Cat</th>
<th>Literature Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td></td>
<td></td>
<td>See also references of WO 2007068088A1</td>
</tr>
</tbody>
</table>

CGP Citing Patents

<table>
<thead>
<tr>
<th>Cited Publication</th>
<th>By</th>
<th>Cat</th>
<th>Citing Patent</th>
<th>Date</th>
<th>Accession Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA:</td>
<td>CAMB-N</td>
<td></td>
<td>CAMBRIDGE SILICON RADIO LTD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN:</td>
<td>LAMANNA P; SORNIN N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

490
The citations also relate to other members of the patent family. In this case, not the European patent is cited but the US family members.

By SET EXPAND CONTINUOUS we prevent the SELECT list from being deleted by later EXPAND.

We SELECT the numbers of the cited patents. There is no SELECT fee on PN.D.

We SELECT the numbers oft he citing patents. There is no SELECT fee on PN.G.

The PICITN format displays citing and cited patent numbers and all citation fields. It includes all cited patent and non-patent literature of EP 1 964 269 and all cited patent and non-patent literature of the family members. It also includes citing documents (forward citations).
Guide to STN Patent Databases

=> D P I C I T N

L2  ANSWER 1 OF 1  IN P A F A M D B COPYRIGHT 2013 E P O / F I Z K A on STN

PI  EP 1964269       A1 20080903

REP  WO 2005025069       A1 20050317 (SEA, pat, Cat: X)
VANDEL ERIC, CH; XEMICS SA, CH
US 20020041651       A1 20020411 (SEA, pat, Cat: X)
ATMEL GERMANY GMBH, DE

REXP  XP011101747 (SEA, Cat: X)

(2) See also references of WO 2007068088A1 (SEA)

REC  4. THERE ARE 4 CITED REFERENCES (2 PATENT, 2 NON PATENT) AVAILABLE FOR THIS RECORD.

PI  EP 1964269       A4 20081224

PI  JP 2008518899       A 20090507

REP  US 20020075091       A1 20020620 (EXA, pat)
JP 2002158584       A1 20020531 (EXA, pat)
JAPAN RADIO CO LTD
JP 2003332907       A 20031121 (EXA, pat)
MATSUSHITA ELECTRIC IND CO LTD
JP 03183213       A 19910809 (EXA, pat)
DELCO ELECTRONICS CORP
JP 10501671       A 19930730 (EXA, pat)
JP 05057934U       A 19910809 (EXA, pat)
JP 02309710       A 19901225 (EXA, pat)
TOKO INC

REC  7. THERE ARE 7 CITED REFERENCES (7 PATENT, 0 NON PATENT) AVAILABLE FOR THIS RECORD.

PI  JP 2011142668       A 20110721

PI  US 20070126512       A1 20070607

CGP  US 8089307       B2 20120103 [US20070126512A1 (APP, pat)]
CAMBRIDGE SILICON RADI O LTD, GB
US 8274325       B2 20120925 [US20070126512A1 (APP, pat)]
CAMBRIDGE SILICON RADI O LTD, GB
US 8278984       B2 20121002 [US20070126512A1 (APP, pat)]
CAMBRIDGE SILICON RADI O LTD, GB
WO 2007112390       A1 20071004 [US20070126512A1 (SEA, pat, Cat: E)]
QUALCOMM, US; WU YUE, US
WO 2009109636       A2 20090911 [US20070126512A1 (SEA, pat, Cat: X)]
CAMBRIDGE SILICON RADI O LTD, GB; LAMANNA PASQUALE, FR; SORNIN NICOLAS, FR
WO 2009109637       A2 20090911 [US20070126512A1 (SEA, pat, Cat: X)]
CAMBRIDGE SILICON RADI O LTD, GB; LAMANNA PASQUALE, FR; SORNIN NICOLAS, FR

PNC.G  6. THERE ARE 6 CITING PATENT REFERENCES AVAILABLE FOR THIS RECORD.

PI  US 7345550       B2 20080318
REP  US 6281758       B1 20010828 (APP, pat)
CONEXANT SYSTEMS INC, US
US 20020075091       A1 20020620 (APP, pat)


REC  4. THERE ARE 4 CITED REFERENCES (2 PATENT, 2 NON PATENT) AVAILABLE FOR THIS RECORD.

CGP  US 20110006820       A1 20110113 [US7345550B2 (PRS, pat)]
MSTAR SEMICONDUCTOR INC, TW
US 20110215848       A1 20110908 [US7345550B2 (PRS, pat)]
QUALCOMM LAB INC, US
US 7706767       B2 20100427 [US7345550B2 (APP, pat)]
Search examples

US 8125254 [US7345555B2 (APP, pat)]
ALTERA CORP, US
PNC. G 4. THERE ARE 4 CITING PATENT REFERENCES AVAILABLE FOR THIS RECORD.

PI  WO 2007068088 A1 20070621
REP  US 20020075091 A1 20020620 (SEA, pat, Cat: X)
REN [1] See also references of EP 1964269A1 (SEA)

REC 2. THERE ARE 2 CITED REFERENCES (1 PATENT, 1 NON PATENT) AVAILABLE FOR THIS RECORD.

2 priorities, 5 applications, 7 publications (1 EPO simple family)

With MAX.H (HIT) we get the wanted family member with its citation information.

=> D MAX. H

L2 ANSWER 1 OF 1 INPAFAMDB COPYRIGHT 2013 EPO/FIZ KA on STN

AN 35612897 INPAFAMDB ED 20080904 EW 200836 UP 20090102 UW 200901
DN 56946985
TI TYPE II PHASE LOCKED LOOP USING DUAL PATH AND DUAL VARACTORS TO REDUCE LOOP FILTER COMPONENTS.
BOUCLE A VERRAOUILLAGE DE PHASE DE TYPE II UTILISANT UNE DOUBLE VOIE ET DES VARACTORS DOUBLES POUR REDUIRE LES COMPOSANTS DE FILTRE A BOUCLE.
TL German; English; French
IN BELLAOUAR, ABDELLATIF; FRIDI, AHMED, R.; BALASUBRAMANIYAN, ARUL, M.
INS BELLAOUAR ABDELLATIF, US; FRIDI AHMED R, US; BALASUBRAMANIYAN ARUL M, US
PA SIRIFIC WIRELESS CORPORATION
PAS SIRIFIC WIRELESS CORP, CA
DT Patent
PI EP 1964269 A1 20080903 English
PIT EPA1 APPLICATION PUBLISHED WITH SEARCH REPORT
DAV 20080903 examined-printed-without-grant
STA PRE-GRA nt PUBLICATION
DS R: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
AI EP 2006-846922 A 20061205
A1T EPA Patent application
PRAI WO 2006-CA1983 W 20061205 (WOWW, 20080904, N)
US 2005-293162 A 20051205 (USA, 20070621, Y)
PRAIT WOWW Additional PCT application
USA Patent application
REP WO 2005025069 A1 20050317 (SEA, pat, Cat: X)
VANDEL ERIC, CH; XEMICS SA, CH
US 20020401651 A1 20020411 (SEA, Cat: X)
ATMEL GERMANY GMBH, DE
REXP XP011101747 (SEA, Cat: X)
[2] See also references of WO 2007068088A1 (SEA)
REC 4. THERE ARE 4 CITED REFERENCES (2 PATENT, 2 NON PATENT) AVAILABLE FOR THIS RECORD.

I PCI H03L0007-081 [1, A]; H03L0007-089 [1, A]; H03L0007-099 [1, A]; H04B0001-40 [1, A]; H04Q0007-32 [1, A]
CPC H03L0007-0893; H03L0007-099; H03L2207-06
EPC H03L0007-089C2; H03L0007-099
ICO T03L207-06
FA AI; AN; DAV; CPC; DS; DT; ED; EPC; EW; ICO; IN; INS; IPC; IPCI; LA; PA; PAS; PI; PIT; PRAI; REN; REP; REXP; TI

The A4 publication is also displayed with HIT. Anyway, it does not have any citation information.

AN 35612897 INPAFAMDB ED 20081229 EW 200852 UP 20081229 UW 200852
DN 56946985
TI TYPE II PHASENREGELKREIS MIT ZWEI FACHEN WEG UND ZWEI FACHEN VARAKTOREN ZUR VERRINGERUNG VON SCHLEIFENFILTERKOMPONENTEN.
Guide to STN Patent Databases

PI    EP 1964269           A4 20081224 English
PIT    EPA4 SUPPLEMENTARY SEARCH REPORT

2 priorities, 5 applications, 7 publications (1 EPO simple family)

Next a list of the publication numbers of the cited patents (no SELECT fee).

=> SEL PN.D
E1 THROUGH E10 ASSIGNED

=> D SEL
E1  3  US20020075091/RPN
E2  1  JP02309710/RPN
E3  1  JP03183213/RPN
E4  1  JP05057934U/RPN
E5  1  JP10501671/RPN
E6  1  JP002158584/RPN
E7  1  JP2003332907/RPN
E8  1  US20020041651/RPN
E9  1  US6281758/RPN
E10 1  WO2005025069/RPN

=> SEL PN.G
E11 THROUGH E20 ASSIGNED

=> D SEL
E11 1  US20110006820/PN.G
E12 1  US20110215848/PN.G
E13 1  US7706767/PN.G
E14 1  US8089307/PN.G
E15 1  US8125254/PN.G
E16 1  US8274325/PN.G
E17 1  US8278984/PN.G
E18 1  WO2007112390/PN.G
E19 1  WO2009109636/PN.G
E20 1  WO2009109637/PN.G

Example 2

We are looking for documents citing patent publications of the German company, Leifheit (excluding any self-citations).

Note: ‘Self-citations’ refers to citations where the company’s own patents are cited.

62.2.1 Search for citations of a company by other companies

=> FIL DPCI
FILE 'DPCI' ENTERED AT
COPYRIGHT (C) 2011 THOMSON REUTERS

=> S LEIF/PACO.D
L1 764 LEIF/PACO.D

=> S L1 NOT LEIF/PACO
L2 650 L1 NOT LEIF/PACO

=> D TRIAL CDP
L2 ANSWER 1 OF 650 DPCI COPYRIGHT 2011 THOMSON REUTERS on STN
AN 2010-Q11635 [201101] DPCI
TI Bottomless baking pan for baking e.g. cakes, has strip formed in regio
CDP Cited Patents

..................

If only citations for a particular patent number are wanted INPADOCDB is apt for this search.
### 62.2.2 Citation frequency of a company by other companies

Which are the companies who cite the patents of Leifheit most frequently?

This type of a search problem always requires use of statistics commands.

For 650 documents it is much more cost-effective to use `ANALYZE` than `SELECT`.

```plaintext
=> ANALYZE L2 1- PA
L3   ANALYZE L2 1- PA : 546 TERMS

=> D
L3   ANALYZE L2 1- PA : 836 TERMS
```

<table>
<thead>
<tr>
<th>TERM #</th>
<th># OCC</th>
<th># DOC</th>
<th>% DOC</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>20</td>
<td>3.08</td>
<td>FREUDENBERG KG CARL</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>13</td>
<td>2.00</td>
<td>HAILO WERK LOH GMBH &amp; CO KG RUDOLF</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
<td>9</td>
<td>1.38</td>
<td>BISSELL INC</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>8</td>
<td>1.23</td>
<td>EMSA WERK WULF GMBH &amp; CO</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>7</td>
<td>1.08</td>
<td>FREUDENBERG FA CARL</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>7</td>
<td>1.08</td>
<td>KAERCHER GMBH&amp;CO KG ALFRED</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>7</td>
<td>1.08</td>
<td>STEINER W</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>6</td>
<td>0.92</td>
<td>DART IND INC</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td>6</td>
<td>0.92</td>
<td>HELEN OF TROY LTD</td>
</tr>
<tr>
<td>10</td>
<td>6</td>
<td>6</td>
<td>0.92</td>
<td>KAERCHER GMBH&amp;CO ALFRED</td>
</tr>
<tr>
<td>11</td>
<td>6</td>
<td>6</td>
<td>0.92</td>
<td>PROCTER &amp; GAMBLE CO</td>
</tr>
<tr>
<td>12</td>
<td>6</td>
<td>6</td>
<td>0.92</td>
<td>WUESTER H</td>
</tr>
</tbody>
</table>
```

Using `ANALYZE PLUS` the various spellings of the patent assignee names can be merged efficiently and a diagram can be produced (see “Patent statistics”).
62.2.3 Citation frequency of the patents of a company

This search is performed twice, once including ‘self-citations’, once without ‘self-citations’ (see above). The advantages of both ways are as follows:

Including ‘self-citations’: a patent with ‘self-citations’ may also be cited frequently by other companies.
Without ‘self-citations’: The citation frequency cannot be biased by ‘self-citations’.

62.2.3.1 Including ‘self-citations’

=> FIL DPCI
FILE 'DPCI' ENTERED AT
COPYRIGHT (C) 2011 THOMSON REUTERS


In this search the ‘self-citations’ are included.

=> S LEIF/PACO
L1  430 LEIF/PACO

There are the counters PNC and OSC. With PNC the number of cited patent numbers is counted. With OSC the number of cited families (Accession Numbers) is counted. To eliminate any influence of the family size OSC is used.

=> ANALYZE L1 1- OSC.G
L2  ANALYZE L1 1- OSC.G :  18 TERMS

Ascending order is chosen to get the lowest number of documents at the top of the list (which increases the probability that a document with a high number of citations is found).

=> D 1- OSC.G DOC A
L2  ANALYZE L1 1- OSC.G :  18 TERMS

TERM #   # OCC # DOC % DOC OSC.G
------------------------
1      1      1  0.23  14

496
With D ANS we get the corresponding answer numbers.

=> d osc.g doc a 1- ans

L2 ANALYZE L1 1- OSC.G : 18 TERMS

TERM #   # OCC  # DOC  % DOC OSC.G
--------  ------  --------  -------  ------------
1       1      1   0.23 14  (ANS: 411)
2       1      1   0.23 28  (ANS: 380)
3       2      2   0.47 11  (ANS: 196,374)
4       2      2   0.47 15  (ANS: 302,339)
5       2      2   0.47 17  (ANS: 295,335)
6       3      3   0.70 13  (ANS: 309,340,372)
7       4      4   0.93 10  (ANS: 252,257,258,294)
8       4      4   0.93 12  ... 

******* END OF L2 *******

This is the most cited document (28×).

=> D L1 380 STD

L1 ANSWER 380 OF 430 DPCI COPYRIGHT 2011 THOMSON REUTERS on STN
AN 1979-H54248 [197936] DPCI
TI Grater and slicer for fruit or vegetables - has baseplate with rectangular opening which locates removable blades that can be stored in slots in body
IN HIMMIGHOFEN D; LIEBSCHER J; SCHULEIN R G
PA (LEIF-C) LEIFHEIT INT LEIFHEIT GMBH G; (LEIF-C) LEIFHEIT INT LEIFHEIT GMBH G
CYC 12
PI BE 875655  A 19790816 (197936)* FR
GB 2018207  A 19791017 (197942) EN
BE 2815415  A 19791018 (197943) DE
NL 7901695  A 19791012 (197943) NL
... NL 187336  B 19910402 (199116) NL
PRAI DE 1979-2909308 19790309

CTS CITATION COUNTERS
----------------------
PNC.D  29 Cited Patents Count
PNC.G  32 Citing Patents Count
IAC.D  6 Cited Issuing Authority Count
IAC.G  5 Citing Issuing Authority Count
CRC   0 Cited Literature Reference Count
Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>OSC.D</th>
<th>Cited Patent WPI Accession Number Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSC.G</td>
<td>Citing Patent WPI Accession Number Count</td>
</tr>
</tbody>
</table>

### Citations

<table>
<thead>
<tr>
<th>Cited Publication</th>
<th>By</th>
<th>Accession Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 290054 B</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>CH 106506 A</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>DE 486721 C</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>DE 1639975 A1</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>DE 1677255 U</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>DE 1937003 U</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>DE 7538063 U</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>GB 1531753 A</td>
<td>Undef</td>
<td>1976-B1253X</td>
</tr>
<tr>
<td>GB 1533244 A</td>
<td>Undef</td>
<td>1976-B1253X</td>
</tr>
<tr>
<td>GB 1533245 A</td>
<td>Undef</td>
<td>1976-B1253X</td>
</tr>
</tbody>
</table>

### Citings

<table>
<thead>
<tr>
<th>Citing Publication</th>
<th>By</th>
<th>Accession Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE 3202881 A</td>
<td>E</td>
<td>1983-741745</td>
</tr>
<tr>
<td>DE 3700012 C</td>
<td>E</td>
<td>1988-148443</td>
</tr>
<tr>
<td>DE 3700013 A</td>
<td>E</td>
<td>1988-198897</td>
</tr>
<tr>
<td>DE 4231648 A1</td>
<td>E</td>
<td>1993-110604</td>
</tr>
<tr>
<td>US 7694615 B2</td>
<td>E</td>
<td>2008-E98327</td>
</tr>
<tr>
<td>WO 8809272 A</td>
<td>E</td>
<td>1988-347000</td>
</tr>
<tr>
<td>WO 2005107544 A1</td>
<td>E</td>
<td>2005-769665</td>
</tr>
<tr>
<td>WO 2006046917 A1</td>
<td>E</td>
<td>2005-807031</td>
</tr>
<tr>
<td>WO 2006074703 A1</td>
<td>E</td>
<td>2006-493753</td>
</tr>
<tr>
<td>DE 202009005476 U1</td>
<td>I</td>
<td>2009-M65635</td>
</tr>
<tr>
<td>DE 202009008591 U1</td>
<td>I</td>
<td>2009-Q15667</td>
</tr>
<tr>
<td>US 7066071 B2</td>
<td>I</td>
<td>2004-757430</td>
</tr>
<tr>
<td>DE 3700013 C</td>
<td>Undef</td>
<td>1988-198897</td>
</tr>
</tbody>
</table>

#### 62.2.3.2 Without ‘self-citations’

The search is repeated, this time excluding ‘self-citations’ by Leifheit.

=> S LEIF/PACO NOT LEIF/PACO.G

L3 325 LEIF/PACO NOT LEIF/PACO.G

=> ANALYZE L3 1- OSC.G

L4 ANALYZE L3 1- OSC.G : 13 TERMS

=> D 1- OSC.G DOC A

L4 ANALYZE L3 1- OSC.G : 13 TERMS

<table>
<thead>
<tr>
<th>TERM #</th>
<th># OCC</th>
<th># DOC</th>
<th>% DOC</th>
<th>OSC.G</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.31</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0.62</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>2</td>
<td>0.62</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0.62</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>3</td>
<td>0.92</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>4</td>
<td>1.23</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>5</td>
<td>1.54</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>9</td>
<td>2.77</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>12</td>
<td>12</td>
<td>3.69</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>25</td>
<td>25</td>
<td>7.69</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>30</td>
<td>30</td>
<td>9.23</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>73</td>
<td>73</td>
<td>22.46</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>157</td>
<td>157</td>
<td>48.31</td>
<td>0</td>
</tr>
</tbody>
</table>

******* END OF L4 *******
Search examples

```
=> D OSC.G DOC A 1- ANS
L4  ANALYZE L3 1- OSC.G : 13 TERMS

TERM #    # OCC  # DOC  % DOC  OSC.G
        ------  ------  ------  ------  ------
        1     1      1  0.31 17
        2     2      2  0.62 10
        3     2      2  0.62 12
        4     2      2  0.62  9
        5     3      3  0.92  8
        6     4      4  1.23  6
        7     5      5  1.54  7

********* END OF L4 ********
```

This document contains ‘third-party citations’ only.

```
=> D L3 233 STD

L3  ANSWER 233 OF 325  DPCI COPYRIGHT 2011  THOMSON REUTERS on STN
AN 1989-158818 (198922)  DPCI
TI  Clothes airer - with tubular suspension elements between two beams enclosing sliding clamping brackets
IN  OMM HJ; TIIWP P
PA  (LEIF-C) LEIFHEIT AG
CYC C4
PI  EP 317657 A  19890531 (198922)* DE 8[5]
    US 4901871 A 19900220 (199014)  EN 7
    EP 317657 B 19911218 (199151)  EN
    DE 3775406 G 19920130 (199206)  DE
    US 4901871 A US 1988-276365 19881123
PRAI EP 1987-117264 19871124

CTS CITATION COUNTERS

PNC.D 16 Cited Patents Count
PNC.G 19 Citing Patents Count
IAC.D 5 Cited Issuing Authority Count
IAC.G 4 Citing Issuing Authority Count
CRC 0 Cited Literature Reference Count
OSC.D 6 Cited Patent WPI Accession Number Count
OSC.G 17 Citing Patent WPI Accession Number Count

Citations

Cited Publication       By       Accession Number

CH 309157 A              E
CH 525523 A              E
CH 556936 A              E  1974-32953V
DE 600995 C              E
DE 600995 C1             E
FR 2510349 A             E  1983-D5440K
GB 378046 A              E
GB 870294 A              E
US 1903262 A             E

Citings

....
```
Guide to STN Patent Databases

### 62.3 Example 3

Which patent publications cite those of Evonik on Enterobacter Species for Biosynthesis as highly relevant documents (i.e. categories X or I)?

>= FI L INPAFAM
FILE 'INPAFAMDB' ENTERED
COPYRIGHT (C) 2013 European Patent Office / FIZ Karlsruhe

=> S (EVONIK OR DEGUSSA)/PASS AND C12N/IPC, CPC AND ENTEROBACT?
L1 63 (EVONIK OR DEGUSSA)/PASS AND C12N/IPC, CPC AND ENTEROBACT?

We select the patent numbers.

=> SEL PN
E1 THROUGH E570 ASSIGNED

Now searching the selected patent numbers in /PN.D, together with the categories “X” or “I”. (S) proximity is used.

=> S E1-E570/PN.D(S)(X OR I)/CAT
L2 31 (EP1382685/PN.D ... EP1430139

Self citations are removed.

=> S L2 NOT (EVONIK OR DEGUSSA)/PASS
L3 27 L2 NOT (EVONIK OR DEGUSSA)/PASS

The PIRE display format is used to see the cited patent information together with the number of the family member.

=> D BRIEF PIRE
L3 ANSWER 1 OF 27 INPAFAMDB COPYRIGHT 2013 EPO/FIZ KA on STN

AN 46069210 INPAFAMDB EDF 20130110 EWF 20130117 UPFB 20130117 WUF 201303
TI A MICROORGANISM FOR METHIONINE PRODUCTION WITH ENHANCED GLUCOSE IMPORT.
INS DISCHERT WANDA, FR; FIGGE RAINER, FR
PAS METABOLIC EXPLORER SA, FR
dischert wanda, fr
figge rainer, fr
IPCI C12P0013-12 [I,A]; C12N0009-12 [I,A]; C12P0013-00 [I,A]
CPC C12N0009-12; C12P0013-001
AB [WO 2013001055 A1]
The present invention is related to a recombinant microorganism for improved methionine production comprising modifications to produce methionine from glucose as main carbon source by fermentation, and modifications to improve glucose import, wherein the glucose import is improved by modifying the expression of at least one gene selected from ptsG, sgrT, sgrS and dgSA. The invention is also related to a method for the fermentative production of methionine or methionine derivatives comprising the steps of: - culturing the recombinant microorganism as described above in an appropriate culture medium comprising a fermentable source of carbon containing glucose and a source of sulphur, and - recovering methionine or methionine derivatives from the culture medium.

PATENT FAMILY INFORMATION INPAFAMDB

+------- Publications +------- +------- Applications +------- +------- Priorities +------- +-------
62.4 Example 4

We use a forward citation search (/PN.G) to find additional prior art documents on transdermal patches for insulin.

=> FIL INPAFAM
FILE 'INPAFAMDB' ENTERED
COPYRIGHT (C) 2013 European Patent Office / FIZ Karlsruhe

=> S A61K0009-7023-HT/CPC AND INSULIN#
L1 63 (EVONIK OR DEGUSSA)/PASS AND C12N/IPC, CPC AND ENTEROBACT?
The documents should be checked for relevance after this search.

=> D 1-11 TI
L1 ANSWER 1 OF 1 INPAFAMDB COPYRIGHT 2013 EPO/FIZ KA on STN
TI PERCUTANEOUS ABSORPTION PROMOTING PHARMACEUTICAL PREPARATION AND PERCUTANEOUS ABSORPTION SYSTEM USING THE SAME.
- TRANSDERMALLY ABSORBABLE PREPARATION AND TRANSDERMALLY ABSORBABLE SYSTEM USING THE SAME.
- PREPARATION ABSORBABLE PAR VOIE TRANSDERMIQUE ET SYSTEME ABSORBABLE PAR VOIE TRANSDERMIQUE UTILISANT CETTE DERNIERE.
FORMULATIONS COMPRISING THERAPEUTICALLY ACTIVE PROTEINS OR POLYPEPTIDES.
- FORMULATIONS COMPRENANT DES PROTEINES OU DES POLYPEPTIDES THERAPEUTIQUEMENT ACTIFS.
- ARZNEIMITTEL ENTHALTEND THERAPEUTISCH WIRKSAME PEPTIDE ODER PROTEINE.
- A FORMULATION FOR ADMINISTERING TRANSDERMALLY A PROTEIN OR POLYPEPTIDE SUCH AS INSULIN.

Taking relevant documents a search for forward citations (i.e., citing documents) may yield more documents that are also relevant. In this case all documents in the answer set are used to search citing documents.
Monitoring search example

63.1 INPADOCDB

Example 1

Patent publications for the ‘manufacturers of inline skates’ example shall be monitored using a profile of three IPC codes and six companies. The search shall be limited to the countries DE, EP and WO and first publications. (Since there are no problems with these countries with the EDP update field this can be used effectively to monitor first publications.) We want publications from May 19, 2007. This example can use either automatic (SDI) or manual monitoring. The latter is shown here:

63.1.1.1 Creating a command file for STN Express

```plaintext
/* SDI INLINE SKATES, INPADOCDB */
FILE INPADOCDB

/* IPC */
/* Using the thesaurus to search for the IPC code */
/* and all its sub-codes. */
=> S A63C0017:04+NT/IPC \_IPC

/* COMPANY NAMES */
=> S (NORDICA )/PA,PAS \_NAME1
=> S (BENETTON (S) SPORT?)/PA,PAS \_NAME2
=> S (DEKA(S)PROD?)/PA,PAS \_NAME3
=> S (SALOMON)/PA,PAS \_NAME4
=> S (MGM (S)(SPA))/PA,PAS \_NAME5
=> S (SKIS (S) ROSSIGNOL)/PA,PAS \_NAME6
=> S \_NAME1 \_NAME6 \_NAME

/* INTERMEDIATE RESULT */
=> S \_IPC OR \_NAME \_RESULT1

/* LINKING OF THE 1ST INTERMEDIATE RESULT WITH THE DESIRED PUBLICATION COUNTRIES */
=> S \_RESULT1 AND (DE OR EP OR WO)/PC \_RESULT2

/* LINKING OF THE 2ND INTERMEDIATE RESULT WITH UPDATE FIELD ‘EDP’ */
/* (FIRST ENTRY) */
=> S \_RESULT2 AND EDP>=20070519 \_RESULT3

/* DISPLAY OF DOCUMENTS */
=> D ALL

63.1.1.2 Search

=> D HIS

FILE 'INPADOCDB' ENTERED
L1  4749 S A63C0017:04+NT/IPC
L2  1916 S (NORDICA )/PA,PAS
L3  184 S (BENETTON (S) SPORT?)/PA,PAS
L4  734 S (DEKA(S)PROD?)/PA,PAS
L5  7860 S (SALOMON)/PA,PAS
L6  46 S (MGM (S)(SPA))/PA,PAS
L7  1482 S (SKIS (S) ROSSIGNOL)/PA,PAS
L8  12190 S L2:\_L7
L9  16402 S L1 OR L8
L10 5193 S L9 AND (DE OR EP OR WO)/PC
L11  53 S L10 AND EDP>=20070519
```
63.1.2 Example 2

To set up a monitoring search in INPADOCDB with this specification:

- **IPC codes:**
  - A47J 27/21 to 27/56, 31/06 to 31/44, 37/12 (range search)
  - B01D complete
  - B01J 39/00 to 49/00 (range search or)
  - C02F complete
  - G01N 27/06 to 27/30, 27/403 to 27/416 (range search)

- **Patent assignee:**
  - Amway Corp.
  - The Clorox Company
  - Culligan International Company
  - Procter & Gamble

- **Countries:**
  - DE, EP, WO

- **Publication kinds:**
  - First publications

- **Further requirements:**
  - Not all documents are going to be displayed, but a selection based on titles shall be made.

63.1.2.1 Notes on the search strategy

EDP is chosen as the update field, yielding the first publication in the national publication sequence.

During a manual search the titles can be displayed first to select a number of documents and the selected documents can be displayed later (if this selection is not going to be done immediately during the on-line session the answer set should be saved with the command SAVE NAME/A).

To follow this procedure with an automatic monitoring (SDI) search ‘online’ delivery must be selected when the SDI is set up.

63.1.2.2 Search

1. **Retrospective search:**

```plaintext
$=> D HIS

FILE 'INPADOCDB' ENTERED
L2  800893 S (B01D)/IPC
L3  35683 S (B01J0039-00 . B01J0049-00)/IPC
L4  338493 S (C02F)/IPC
L5  105460 S (G01N0027-06 . G01N0027-30 OR G01N0027-403 . G01N0027-416)/IPC
L6  1221685 S L1-L5
L7   472 S (AMWAY)/PA,PAS
L8   1890 S (CLOROX OR CLORUX)/PA,PAS
L9    378 S (CULLIGAN)/PA,PAS
L10   364 S (CUNO INC)/PA,PAS
L11   92608 S (PROCTER OR PROKER OR PROCTOR)/PA,PAS
L12  163387 S (GAM#### OR CABLE OR CAMBLE OR GABLE OR GEHMEL)/PA,PAS
L13  89563 S L11(S) L12
L14   92867 S L7 OR L8 OR L9 OR L10 OR L13
L15  248380 S (DE OR EP OR WO)/PC AND (L6 OR L14)
```
2. Setting up the SDI:

```plaintext
=> SDI
ENTER QUERY L# FOR SDI REQUEST OR (END): L15
ENTER UPDATE FIELD CODE (UP) OR ?: EDP
ENTER SDI REQUEST NAME, (AA024/S), OR END: DEEPWO/S
ENTER COST CENTER (NONE) OR NONE: NONE
ENTER TITLE (NONE) OR NONE: EXAMPLE1
ENTER METHOD OF DELIVERY (OFFLINE), ONLINE, OR EMAIL: ONLINE
ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN? Y/N: Y
HIGHLIGHT HIT TERMS? (Y)/N: Y
ENTER SDI EXPIRATION DATE 'YYYMMDD' OR (NONE): .
QUERY L15 HAS BEEN SAVED AS SDI REQUEST 'DEEPWO/S'
```

3. Checking the SDI:

```plaintext
=> D SAVED/S
NAME             CREATED      NOTES/TITLE
------------- --------------- --------------------------
DEEPWO/S         09 AUG 2007  SDI REQUEST FOR FILE INPADOCDB EXAMPLE1
```

4. Checking the first SDI run, activating the answer set and displaying the titles:

```plaintext
=> D SAVED
NAME             CREATED      NOTES/TITLE
------------- --------------- --------------------------
DEEPWO001/A      16 AUG 2007  248 ANSWERS IN FILE INPADOC EXAMPLE1
```

```plaintext
=> ACTIVATE DEEPWO001/A
=> D 1 5 14 27 ... ALL
```

5. Evaluation of the titles

6. Activating the answer set and displaying the selected documents:

```plaintext
=> ACTIVATE DEEPWO01/A
=> D 1 5 14 27 ... ALL
```

### 63.1.2.3 Difficult cases

**a)** The above example to include any of the countries GB, IL, NO, or SE:

In these countries there are A0 publications (publication of the fact that a patent application was filed, no document published).

In this case the update field /ED (rather than /EDP) should be used. As in this case all subsequent publications appear in the monitoring results the question ‘ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN?’ should be answered YES.

**b)** The above example to include US and JP as completely as possible:

In US publications of applications usually no assignee is given.

The applicant and the title are often missing in Japanese publications.

If /EDP (or /EDPR) is used the same applies as above, i.e. all publications in the national publication sequence (and/or the patent family) are lost. /ED should be used.

**c)** The example above is to include WO publications as completely as possible:

IPC codes are missing in 7% of all WO publications.

In this case /UP should be used as update code. When setting up the SDI the question “ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN?” should be answered NO.

### 63.1.3 Example 3

Here are a few examples to demonstrate the use of special update fields in INPADOCDB.
63.1.3.1 1st Example

The European publication number, EP 1491 511, is to be monitored with regard to grant and changes of the legal status. Second the whole patent family is to be monitored.

=> F I L I N P A D O C D B
FILE 'INPADOCDB' ENTERED AT COPYRIGHT (C) 2008 European Patent Office / FIZ Karlsruhe

The search is done for the current update week. The update field used is /EDLS.

=> S  E P 1915043 /PN AND EDLS>20080424
L6  0 EP 1915043 /PN AND EDLS>20080424

The result is zero. This means no grant was published and there was no legal status change for this application.

Now the /UPFE field is used, i.e., the whole family is monitored for grants or legal status changes.

=> S  E P 1915043 /PN AND UPFE>20080424
L7  1 EP 1915043 /PN AND UPFE>20080424

There is one hit.

=> D B R O W S E

FFAMED is used to display the result, i.e., only the changes to the patent family are shown. This format only includes the current update week. It can be thus be used only if monitoring weekly (either manually or by SDI command).

We can see that one US publication was added.

:FFAMED

----------
MEMBER 2
----------

AN 56241766 INPADOCDB ED 20080430 EW 200818 UP 20080430 UW 200818
FN 36675482
TI Circuit component locating apparatus.
TL English
IN KERR GEOFFREY H.
INS KERR GEOFFREY H, NU
PAS KERR GEOFFREY H
DT Patent
PI US 20080068667 A1 20080417 English
PIT USA1 FIRST PUBLISHED PATENT APPLICATION [FROM 2001 ONWARDS]
DAV 20080417 unexamined-printed-without-grant
STA PRE-GRANT PUBLICATION
AI US 2007-906919 A 20071004
AIT USA Patent application
PRAI EP 2006-122447 A 20061017 (EPA)
PRAIT EPA Patent application
IPCI B23P0019-00 [I,A]; B23P0019-00 [I,C]
NCL X361679; 295921; X 29739
EPC H05K0007-12
FA AB; AI; AN; DAV; DT; ED; EPC; EW, IN; INS; IPC; IPCI; LA; NCL; PAS; PI;
PIT; PRAI; TI

1 priority, 2 applications, 2 publications

This CFAM display would not be strictly necessary. This is just to show the complete patent family.

:CFAM

L7 ANSWER 1 OF 1 INPADOCDB COPYRIGHT 2008 EPO/FIZ KA on STN

PATENT FAMILY INFORMATION
AN 56204031 INPADOCDB
Search examples

+-----------------------------+  
| EP 1915043 | A1 20080423 |
| US 20080086867 | A1 20080417 |

:END

This monitoring of the patent family could also be done in INPAFAMDB in exactly the same way.

63.1.3.2 2nd Example

The company, Rohde & Schwarz, is being monitored for grant publications and legal status changes. First the manual monitoring is shown and then an automatic monitoring profile (SDI) is set up.

a) Manual monitoring

=> S (ROHDE (S) SCHWARZ)/PA,PAS AND EDLS>20070815

L1 20 (ROHDE (S) SCHWARZ)/PA,PAS AND EDLS>20070815

When monitoring a company the FSORT command should be used because otherwise several members of the same patent family may be displayed.

=> FSORT L3

L2 20 FSO L1

3 Multi-record Families Answers 1-7
Family 1 Answers 1-3
Family 2 Answers 4-5
Family 3 Answers 6-7
13 Individual Records Answers 8-20
0 Non-patent Records

D FFAMED displays only documents updated during the current update week. With PFAM only one document from each family is displayed.

=> D PFAM 1- FFAMED

L2 ANSWER 1 OF 20 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN

..............
MEMBER 3
..............

AN 53800142 INPADOCDB ED 20070816 EW 200733 UP 20070816 UW 200733
TI Kalibrierte Mikrowellen-Schaltung mit beleuchtbaren GaAs-FET sowie Kalibrierung und Verfahren zur Kalibrierung.
TL German
IN KRAEMER, WILHELM
INS KRAEMER WILHELM, DE
PA ROHDE & SCHWARZ GMBH & CO. KG
PAS ROHDE & SCHWARZ, DE
DT Patent
PI DE 502005000980 D1 20070816
PIT DED1 GRANTED EP NUMBER IN BULLETIN [FROM 1,400,000 ON]
DAV 20070816 gazette-pub-announcement
STA GRANTED
AI DE 2005-502005000980 T 20050422
ALT DET Translation
PRAIT DEA Patent application
IPCI H01P0001-15 [I,A]; H01P0001-22 [I,A]; H01P0001-10 [I,C*]; H01P0001-22 [I,C*]
IPCR H03H0011-14 [I,A]; H03H0011-24 [I,A]; H03K0017-04 [I,A]; H03K0017-16 [I,A]; H03K0017-687 [I,A]; H03K0011-02 [I,C*]; H03K0011-04 [I,C*]; H03K0017-04 [I,C*]; H03K0017-16 [I,C*]; H03K0017-687 [I,C*]
EPC H01P0001-15; H01P0001-22
FA AI; AN; DAV; DT; ED; EPC; EW; IN; INS; IPC; IPCI; IPCR; PA; PAS; PI; PIT;
Guide to STN Patent Databases

PRAI; TI

MEMBER 5

AN 50398799 INPADOCDB UP 20070315 UW 200711
PI EP 1715543 A1 20061025

AN 50398799 INPADOCDB ED 20070705 EW 200727 UP 20070705 UW 200727
PI EP 1715543 B1 20070704

LEGAL STATUS CURRENT UPDATE
AN 50398799 INPADOCDB
20070816 EPREF CORRESPONDS TO:
DE 502005000980 P 20070816 200733.................................20070816

MEMBER 6

AN 53785683 INPADOCDB ED 20070816 EW 200733 UP 20070816 UW 200733
TI Calibratable microwave circuit with illuminable GaAs-FET, calibrating device and process.
TL English
IN KRAEMER WILHELM
INS KRAEMER WILHELM, DE
PA ROHDE & SCHWARZ GMBH & CO.KG
PAS ROHDE & SCHWARZ, DE
DT Patent
PI US 20070176129 A1 20070802 English
PIT USA1 FIRST PUBLISHED PATENT APPLICATION [FROM 2001 ONWARDS]
DAV 20070802 unexamined printed without grant
STA PRE-GRANT PUBLICATION
AI US 2005-575741 A 20050422
AIT USA Patent application
PRAI DE 2004-102004024367 A 20040517 (DEA)
W0 2005-EP4330 W 20050422 (WOWW)
PRAIT DEA Patent application
WOWW Additional PCT application
IPCI G02B0007-00 [I,A]; G02B0027-00 [I,C*]
IPCR H01P0001-15 [I,A]; H01P0001-22 [I,A]; H03H0011-14 [I,A]; H03H0011-24 [I,A]; H03K0011-04 [I,A]; H03K0017-16 [I,A]; H03K0017-687 [I,A]; H01P0001-10 [I,C*]; H01P0001-22 [I,C*]; H03H0011-02 [I,C*]; H03K0011-04 [I,C*]; H03K0017-04 [I,C*]; H03K0017-16 [I,C*]; H03K0017-687 [I,C*]
NCL 2505351000
EPC H01P0001-15; H01P0001-22
FA AB; A1; AN; DAV; DT; ED; EPC; EW; IN; INS; IPC; IPCI; IPCR; LA; NCL; PA;
PAS; PI; PIT; PRAI; TI

3 priorities, 7 applications, 10 publications ...

With /UPFE there is a larger number of hits.
This search could also be done in INPAFAMDB. FSORT would not be necessary there.

=> S (ROHDE (S) SCHWARZ) / PA, PAS AND UPFE>20070815
L3 60 (ROHDE (S) SCHWARZ) / PA, PAS AND UPFE>20070815

FSORT is used again.

=> FSORT L3

L4 60 FSO L3

14 Multi-record Families Answers 1-58
Family 1 Answers 1-7
Family 2 Answers 8-9
Family 3 Answers 10-12
Search examples

<table>
<thead>
<tr>
<th>Family</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family 4</td>
<td>13-16</td>
</tr>
<tr>
<td>Family 5</td>
<td>17-26</td>
</tr>
<tr>
<td>Family 6</td>
<td>27-28</td>
</tr>
<tr>
<td>Family 7</td>
<td>29-37</td>
</tr>
<tr>
<td>Family 8</td>
<td>36-40</td>
</tr>
<tr>
<td>Family 9</td>
<td>41-42</td>
</tr>
<tr>
<td>Family 10</td>
<td>43-44</td>
</tr>
<tr>
<td>Family 11</td>
<td>45-47</td>
</tr>
<tr>
<td>Family 12</td>
<td>48-52</td>
</tr>
<tr>
<td>Family 13</td>
<td>53-54</td>
</tr>
<tr>
<td>Family 14</td>
<td>55-58</td>
</tr>
<tr>
<td>Family 15</td>
<td></td>
</tr>
<tr>
<td>Family 16</td>
<td></td>
</tr>
<tr>
<td>Family 17</td>
<td></td>
</tr>
<tr>
<td>Family 18</td>
<td></td>
</tr>
<tr>
<td>Family 19</td>
<td></td>
</tr>
<tr>
<td>Family 20</td>
<td></td>
</tr>
<tr>
<td>Family 21</td>
<td></td>
</tr>
<tr>
<td>Family 22</td>
<td></td>
</tr>
<tr>
<td>Family 23</td>
<td></td>
</tr>
<tr>
<td>Family 24</td>
<td></td>
</tr>
<tr>
<td>Family 25</td>
<td></td>
</tr>
<tr>
<td>Family 26</td>
<td></td>
</tr>
<tr>
<td>Family 27</td>
<td></td>
</tr>
<tr>
<td>Family 28</td>
<td></td>
</tr>
<tr>
<td>Family 29</td>
<td></td>
</tr>
<tr>
<td>Family 30</td>
<td></td>
</tr>
<tr>
<td>Family 31</td>
<td></td>
</tr>
<tr>
<td>Family 32</td>
<td></td>
</tr>
<tr>
<td>Family 33</td>
<td></td>
</tr>
<tr>
<td>Family 34</td>
<td></td>
</tr>
<tr>
<td>Family 35</td>
<td></td>
</tr>
<tr>
<td>Family 36</td>
<td></td>
</tr>
<tr>
<td>Family 37</td>
<td></td>
</tr>
<tr>
<td>Family 38</td>
<td></td>
</tr>
<tr>
<td>Family 39</td>
<td></td>
</tr>
<tr>
<td>Family 40</td>
<td></td>
</tr>
<tr>
<td>Family 41</td>
<td></td>
</tr>
<tr>
<td>Family 42</td>
<td></td>
</tr>
<tr>
<td>Family 43</td>
<td></td>
</tr>
<tr>
<td>Family 44</td>
<td></td>
</tr>
<tr>
<td>Family 45</td>
<td></td>
</tr>
<tr>
<td>Family 46</td>
<td></td>
</tr>
<tr>
<td>Family 47</td>
<td></td>
</tr>
<tr>
<td>Family 48</td>
<td></td>
</tr>
<tr>
<td>Family 49</td>
<td></td>
</tr>
<tr>
<td>Family 50</td>
<td></td>
</tr>
<tr>
<td>Family 51</td>
<td></td>
</tr>
<tr>
<td>Family 52</td>
<td></td>
</tr>
<tr>
<td>Family 53</td>
<td></td>
</tr>
<tr>
<td>Family 54</td>
<td></td>
</tr>
<tr>
<td>Family 55</td>
<td></td>
</tr>
<tr>
<td>Family 56</td>
<td></td>
</tr>
<tr>
<td>Family 57</td>
<td></td>
</tr>
<tr>
<td>Family 58</td>
<td></td>
</tr>
<tr>
<td>Family 59</td>
<td></td>
</tr>
<tr>
<td>Family 60</td>
<td></td>
</tr>
<tr>
<td>Family 61</td>
<td></td>
</tr>
<tr>
<td>Family 62</td>
<td></td>
</tr>
<tr>
<td>Family 63</td>
<td></td>
</tr>
<tr>
<td>Family 64</td>
<td></td>
</tr>
<tr>
<td>Family 65</td>
<td></td>
</tr>
<tr>
<td>Family 66</td>
<td></td>
</tr>
<tr>
<td>Family 67</td>
<td></td>
</tr>
<tr>
<td>Family 68</td>
<td></td>
</tr>
<tr>
<td>Family 69</td>
<td></td>
</tr>
<tr>
<td>Family 70</td>
<td></td>
</tr>
<tr>
<td>Family 71</td>
<td></td>
</tr>
<tr>
<td>Family 72</td>
<td></td>
</tr>
<tr>
<td>Family 73</td>
<td></td>
</tr>
<tr>
<td>Family 74</td>
<td></td>
</tr>
<tr>
<td>Family 75</td>
<td></td>
</tr>
<tr>
<td>Family 76</td>
<td></td>
</tr>
<tr>
<td>Family 77</td>
<td></td>
</tr>
<tr>
<td>Family 78</td>
<td></td>
</tr>
<tr>
<td>Family 79</td>
<td></td>
</tr>
<tr>
<td>Family 80</td>
<td></td>
</tr>
<tr>
<td>Family 81</td>
<td></td>
</tr>
<tr>
<td>Family 82</td>
<td></td>
</tr>
<tr>
<td>Family 83</td>
<td></td>
</tr>
<tr>
<td>Family 84</td>
<td></td>
</tr>
<tr>
<td>Family 85</td>
<td></td>
</tr>
<tr>
<td>Family 86</td>
<td></td>
</tr>
<tr>
<td>Family 87</td>
<td></td>
</tr>
<tr>
<td>Family 88</td>
<td></td>
</tr>
<tr>
<td>Family 89</td>
<td></td>
</tr>
<tr>
<td>Family 90</td>
<td></td>
</tr>
<tr>
<td>Family 91</td>
<td></td>
</tr>
<tr>
<td>Family 92</td>
<td></td>
</tr>
<tr>
<td>Family 93</td>
<td></td>
</tr>
<tr>
<td>Family 94</td>
<td></td>
</tr>
<tr>
<td>Family 95</td>
<td></td>
</tr>
<tr>
<td>Family 96</td>
<td></td>
</tr>
<tr>
<td>Family 97</td>
<td></td>
</tr>
<tr>
<td>Family 98</td>
<td></td>
</tr>
<tr>
<td>Family 99</td>
<td></td>
</tr>
<tr>
<td>Family 100</td>
<td></td>
</tr>
</tbody>
</table>

With this command only one document updated during the last week is displayed from each patent family.

=> D PFAM 1- FFAMED

b) Set-up of an SDI

The FSORT command cannot be used within an SDI profile. To use the above strategy anyway, ‘ONLINE’ is chosen as ‘METHOD OF DELIVERY’ when the SDI profile is set up.

=> QUE (ROHDE (S) SCHWARZ)/PA,PAS
L1  QUE (ROHDE (S) SCHWARZ)/PA,PAS

=> SDI

ENTER QUERY L# FOR SDI REQUEST OR (END): L1
ENTER UPDATE FIELD CODE (UP) OR ?: EDLS
ENTER SDI REQUEST NAME, (AA033/S), OR END: ROHDE1/S
ENTER COST CENTER (NONE) OR NONE:
ENTER METHOD OF DELIVERY (OFFLINE), ONLINE, OR EMAIL: ONLINE
ELIMINATE PREVIOUSLY SEEN ANSWERS WITH EACH SDI RUN? Y/N:
HIGHLIGHT HIT TERMS? Y/N:
ENTER SDI EXPIRATION DATE ‘YYYYMMDD’ OR (NONE):
QUERY L1 HAS BEEN SAVED AS SDI REQUEST ‘ROHDE1/S’

First result of monitoring:

<table>
<thead>
<tr>
<th>NAME</th>
<th>CREATED</th>
<th>NOTES/TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROHDE135/A</td>
<td>25 AUG 2007</td>
<td>9 ANSWERS IN FILE</td>
</tr>
</tbody>
</table>

=> ACTIVATE ROHDE135/A
L1  QUE ABB=ON (ROHDE (S) SCHWARZ)/PA,PAS
L2  9 SEA FILE=INPADOCDB ABB=ON L1 AND 20070817-20070823/EDLS L2
Now the answer set can be sorted by FSORT.

=> FSORT L2
L3  9 FSO L2

0 Multi-record Families
9 Individual Records  Answers 1-9
0 Non-patent Records

But there are no multi-record families in this update week.

=> D

AN 54248098 INPADOCDB ED 20070823 EW 200734 UP 20070823 UW 200734
TI Verfahren zur Darstellung der Messergebnisse eines Netzwerkanalysators mit gleichzeitiger Toleranzanzeige.
TL German
IN HIEBEL, MICHAEL; PHILIPP, UTE
INS HIEBEL MICHAEL, DE; PHILIPP UTE, DE
PA ROHDE & SCHWARZ GMBH & CO. KG
PAS ROHDE & SCHWARZ, DE
DT Patent
PI DE 102006008063 A1 20070823
PIT DEA1 DOC. LAID OPEN (FIRST PUBLICATION)
Guide to STN Patent Databases

63.1.3.3  3rd Example

The applications of the company, Bayer Cropscience, shall be monitored for granting:

Setting up the search profile for an automatic SDI.

=> S (BAYER CROPSCIENCE ) / PA (L) GRANTED/ STA(L) ED/ LAST
  199214 BAYER /PA
  8582 CROPSCIENCE /PA
  6425 (BAYER CROPSCIENCE ) /PA
  25614168 GRANTED/ STA
  1531695 ED/ LAST
  (20060821 - 20070821 / ED)
L1  272 (BAYER CROPSCIENCE ) / PA (L) GRANTED/ STA(L) ED/ LAST

Setting up the search profile for a manual SDI.

=> S (BAYER CROPSCIENCE ) / PA (L) GRANTED/ STA(L) ED>20070816
  199214 BAYER /PA
  8582 CROPSCIENCE /PA
  6425 (BAYER CROPSCIENCE ) /PA
  25614168 GRANTED/ STA
  64223 ED>20070815
  (ED>20070815)
L3  21 (BAYER CROPSCIENCE ) / PA (L) GRANTED/ STA(L) ED>20070815

=> D

63.1.3.4  4th Example

We want to monitor patents/applications if they are still in force/pending. For this search the legal status category NIF (Lapses, Expiries, Withdrawals, Refusals) is used.

First a few national publication numbers to be monitored are entered.
The 3 numbers below have the category NIF during the period that was monitored.

It is necessary to display the documents because it may be that there are documents where both NIF and REI occur at the same time. A Reinstatement/Restoration is even possible at a later time.
Guide to STN Patent Databases

20070816 DE8130 - WITHDRAWAL
NIF Lapses, Expiries, Withdrawals, Refusals
200733........................................20070816

20070816 DE8178 + SUSPENSION CANCELLED
REI Reinstatement or Restoration
200733........................................20070816

It is even possible that an NIF code is published first and later an extension of the period of protection is published by a SPC code.

L9 ANSWER 2 OF 14 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
TI Diagnosis, evaluation and treatment of coronary artery disease by exercise simulation using closed loop drug delivery of an exercise simulating agent beta agonist.
PA GENSI A PHARMACEUTICALS, INC.
PI US 5234404 A 19930810

LEGAL STATUS
AN 47591164 INPADOCDB
19940621 USCC CERTIFICATE OF CORRECTION
20010816 USFP EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE
20030708 US356 + PATENT TERM EXTENSION UNDER 35 U.S.C. 156
PRODUCT NAME: GENESA
20100810
20110912

SPC Suppl. Protect. Certificate, Time Extension
Extra checks are thus necessary.

We want to monitor EP publications of the company, Alcatel. The NIF category is set either for the EP publication altogether or for each individual country. If NIF appears this does not automatically mean that the EP patent has expired in all designated countries.
Search examples

We are now going to monitor WO publications of the company Siemens during a longer period of time. With WO publications, the NIF category is set either for the WO publication as a whole or for individual countries. If NIF appears this does not automatically mean that the WO application is not pending any more in any designated country. With WO applications one should look for NON ENTRY into the national phase.

=> S SIEMENS/PA,PAS AND WO/PC AND NIF/LSC2(L)UPLS>20060815
L14 441 SIEMENS/PA,PAS AND WO/PC AND NIF/LSC2(L)UPLS>20060815

=> D 1-5 HIT

L14 ANSWER 1 OF 441 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
PA SIEMENS AKTIENGESELLSCHAFT OESTERREICH; INGRUBER, OTTO; KANZIAN, CHRISTIAN; SCHMOELLER, FRANZ
PAS SIEMENS AG OESTERREICH, AT; INGRUBER OTTO, AT; KANZIAN CHRISTIAN, AT; SCHMOELLER FRANZ, DE
PI WO 2006094972 A1 20060914

LEGAL STATUS HIT
AN 15613027 1 INPADOCDB
20070208 WOWA - WITHDRAWAL OF INTERNATIONAL APPLICATION
NIF Lapses, Expiries, Withdrawals, Refusals
200708...........................................20070222

L14 ANSWER 2 OF 441 INPADOCDB COPYRIGHT 2007 EPO/FIZ KA on STN
PA SIEMENS CORPORATE RESEARCH, INC.; GRADY, LEO
PAS SIEMENS CORP RES INC, US; GRADY LEO, US
PI WO 2006036789 A2 20060406
PA SIEMENS MEDICAL SOLUTIONS USA, INC.; GRADY, LEO

513
Guide to STN Patent Databases

The NIF category may basically be used to monitor for the lapse of a patent or of an application. Anyway, one should always consider that a later event might revert this ‘lapse’ (REI, SPC). For EP orWO applications the NIF code does not always mean that all Designated States are concerned.

63.1.4 Script package

This zip file contains a number of scripts for manual monitoring of patents:


These scripts make use of the benefits of manual processing and use commands like FSEARCH, FSORT, and TRANSFER that cannot be used in an automatic monitoring (SDI) profile. Moreover it is much easier to adapt the search strategy to changing requirements (e.g. changing numbers). To create these scripts the script language of STN EXPRESS was used. The scripts are started by RUN COMMAND FILE (in STN EXPRESS). They prompt for user input.

Apart from the scripts (.sc) some of the directories in the zip file also contain text files (.txt) demonstrating input formats and transcript files (.t)rn) demonstrating the results.

The zip file contains the directories and scripts listed below:

63.1.4.1 FAMILY

The script UPFAM.SC allows weekly monitoring of a list of patents for new publications and legal status changes in the patent family in the INPADOC database. The script uses update codes and display formats for Family SDI.
Search examples

The text file has in the first line the current query date (e.g. 20041004). Each consecutive line has a patent number and a user-specific key that is put in front of the corresponding result. The monitoring result is put in the file, UR20041004.TRN, having the current query date in its file name. All search steps are logged in a separate file, UQ20041004.TRN.

63.1.4.2 FAMILY AGENT

The script UPFAM_AC.SC was developed from the FAMILY script. It was extended with an option to assign a user to each monitoring case.

This is the structure of the file FAMLISTAC.TXT:

<table>
<thead>
<tr>
<th>Patent number</th>
<th>User</th>
<th>Case number</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP1472097</td>
<td>ABC</td>
<td>A001</td>
</tr>
<tr>
<td>EP1472505</td>
<td>ABC</td>
<td>A002</td>
</tr>
</tbody>
</table>

The patent number is in position 1–20, the user is in position 21–30, the case number is in position 31–40.

The search steps are again logged in UQ....TRN. The results are saved to separate files for each user. Sample files are included.

63.1.4.3 NUMBERS

a) The NEU_PRN.SC script uses the FSEARCH command to return all priority numbers in a patent family. The input patent numbers must be provided one per line in a text file. The result can then be used to perform other monitoring tasks.

The user is prompted for the text file name.

b) The NUMBERSTART.SC script prompts for input to start other scripts that can be used to perform searches and display commands for various numbers or number lists. Details can be found in the individual scripts.

63.1.4.4 SCOPE

The SCOPE.SC script performs monitoring by IPC codes and keywords in INPADOC. The IPC codes must be provided in the file IPCLIST.TXT, the keywords in the file TERM.TXT. The search result is limited to a list of countries and the period since the previous search date. The input data are stored in the file DATEPC.TXT: the first line holds the previous search date, the second line holds the current date and subsequent lines hold the countries to include in the search.

63.1.4.5 UPDATE

The UPDATE.SC script is used to monitor patent families by their priority numbers (PRN). The file SEAPRN.TXT provides the input: The first line holds the previous search date, the second line holds the current date and subsequent lines hold the priority numbers to include in the search.

63.1.4.6 WATCH

The WATCH_FSE.SC script uses the FSEARCH command to perform monitoring of patent families by a list of patent numbers. Sample data can be found in the file FAMLIST6.TXT.

The WATCH_TRA.SC script uses the TRANSFER command (charges apply) for monitoring; it shows the use of a counter. The TRANSFER command is run repeatedly (up to 8 times) until the number of hits stops rising.
63.2 Chemical Abstracts

New publications are often entered into the Chemical Abstracts (CAPlus, HCAPlus, ZCAPlus) without Indexing information in the first place. The indexing information is added at a later time and can be searched separately. For that the right Update field must be used.

=> FILE HCAPL
FILE 'HCAPLUS' ENTERED AT
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

A short search by keywords.

=> S OPTICAL (2A) (FIBER# OR FIBRE#)
L1 68194 OPTICAL (2A) (FIBER# OR FIBRE#)

The result is limited to documents from the last 6 weeks.

=> S L1 AND ED>20080401 AND P/DT
L2 213 L1 AND ED>20080401 AND P/DT

The newest patent is displayed. There is no Index terms (IT) field available!

=> D ALL

L2 ANSWER 1 OF 213 HCAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:555225 HCAPLUS
ED Entered STN: 08 May 2008
TI Optical fiber flail with integrated power supply and light source for rotary cutting tools
IN Freeman, Basil Norman
PA Innover Technologies Ltd., Can.
SO PCT Int. Appl.
CODEN: P1XXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE
--------------- ---- -------------------------- ------------
P1 WO 2008052320 A1 20080508 WO 2007CA1922 20071029

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KM, KN, KP, KR, KZ, LA, LC, LK, LS, LT, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, NY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, BS, SC, SD, SE, SO, SK, SL, SM, SV, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW,
GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, TG, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, Tj, TM

PRAI US 2006-863807 P 20061101

CLASS
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
--------------- -------------------------- -----------------------------------
WO 2008052320 IPCI A01D0034-416 [I,A]; A01D0034-412 [I,C*]; A01G0003-06
[I,A]; A01G0003-00 [I,C*]; F21V0008-00 [I,A]; G02B0006-24 [I,A]

AB A method of improving the control of a rotary cutting machine is disclosed. The cutting element of the rotary cutting machine being a filament which is rotated at high velocity under the control of a motor, such as powered by a battery or gasoline. The invention provides within the lower rotating head of the rotary cutting machine an optical source which illuminates the filament such that the distal rotating end of the filament provides a visual indication to an operator of the location of the rotating cutting element. In an embodiment of the invention the electrical power for the optical source is provided by providing an electrical generator within the rotary cutting machine such that for example the rotor is within the rotating head and the stator is within the upper body of the rotary cutting machine.
Search examples

Search with the update code UPI.
The UPI field is updated when the Indexing information is added.

=> $ L1 AND UPI>20080401 AND P/DT
L3 131 L1 AND UPI>20080401 AND P/DT

This is the newest patent with Indexing information.

=> D ALL
L3 ANSWER 1 OF 131 HCAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:523776 HCAPLUS
DN 148:462178
ED Entered STN: 01 May 2008
TI Optical measuring cell in the form of a hollow fiber
IN Fleischer, Maximilian; Lampe, Uwe; Strzoda, Rainer
PA Siemens A.-G., Germany
SO Ger., 6pp.
CODEN: GWXXAW
DT Patent
LA German
CC 80-2 (Organic Analytical Chemistry)
FAN.CNT 1
<table>
<thead>
<tr>
<th>PATENT NO.</th>
<th>KIND</th>
<th>DATE</th>
<th>APPLICATION NO.</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE 102006055157</td>
<td>B3</td>
<td>20080430</td>
<td>DE 2006-102006055157</td>
<td>20061122</td>
</tr>
<tr>
<td>PRAI DE 2006-102006055157</td>
<td></td>
<td>20061122</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CLASS
<table>
<thead>
<tr>
<th>PATENT NO.</th>
<th>CLASS</th>
<th>PATENT FAMILY</th>
<th>CLASSIFICATION CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE 102006055157</td>
<td>IPCI G01N0021</td>
<td>G01N0021-31 [1, A]; G01N0021-01 [1, A]</td>
<td></td>
</tr>
</tbody>
</table>
AB An optical measuring cell for gas absorption measurements includes at least one light source, a photodetector for detecting the light passed through the measuring volume, and a processor for determining the concentration of at least one gas component. The measuring volume is defined by the internal volume of a hollow fiber having an inner diameter of < 1 mm. The device is equipped with a gas transport device for supplying the measuring volume with the measuring gas or a rinsing gas. The gas transport device includes a pressurized gas cylinder. The gas transport device includes a gas generator with a pump and a gas filter. The hollow fiber has light-reflecting properties.
ST optical measuring cell gas analysis hollow fiber
IT Fibers
RL: TEM (Technical or engineered material use); USES (Uses)
(hollow; optical measuring cell in form of hollow fiber)
IT Gas analysis
Gas generators
Optical detectors
Optical gas sensors
(optical measuring cell in form of hollow fiber)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE (1) Anon; WO 0064492 A1 HCAPLUS
(2) Anon; WO 2005031354 A2 HCAPLUS
(3) Anon; WO 2006033635 A1 HCAPLUS

If one wants to search for the descriptor OPTICAL FIBERS the appropriate field must be used.

=> S OPTICAL FIBERS/CT AND UPI>20080401 AND P/DT
L4 100 OPTICAL FIBERS/CT AND UPI>20080401 AND P/DT

=> D L4 TI IT
L4 ANSWER 1 OF 100 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Tissue scanning apparatus and method
IT Diffraction gratings
(Fiber; tissue scanning apparatus and method)
IT Apparatus
(Tissue scanning; tissue scanning apparatus and method)
Guide to STN Patent Databases

IT Information systems (data; tissue scanning apparatus and method)
IT IR radiation (near-IR; tissue scanning apparatus and method)
IT Animal tissue Electric switches Lasers Light sources Optical fibers Optical modulators Optical reflectors Optical scanners Sensors Wavelength (tissue scanning apparatus and method)
64 Multi-file search example

These search examples demonstrate some strategies to perform online searches in multiple files.

64.1 Subject search – Example 1

After a search in the Chemical Abstracts database we would like to retrieve the corresponding documents from the World Patents Index, which will provide additional information. To group the documents by patent families FSORT and D PFAM are used. How to use the Patent Family Manager of STN Express is demonstrated, too.

64.1.1 Search in Chemical Abstracts PLUS and DWPI

Switch to DWPI and HCAPPLUS. The order of the file names governs the order in which the family members are going to be arranged by the FSORT command later on.

Using TRANSFER, the patent, application, and priority numbers from the records are searched in both databases.

FSORT groups the documents by patent families.

As a result, the sorted patent families are displayed. Sometimes more than one record from each database is present in a family.

Some documents have no equivalents. The main reasons for this are the different country and time coverage.
Guide to STN Patent Databases

197 Individual Records Answers 590-786
0 Non-patent Records

SET SMARTSELECT OFF
SET COMMAND COMPLETED

SET HIGHLIGHTING DEF
SET COMMAND COMPLETED

Using D PFAM=1–2 only one documents of the first two families is displayed.

=> D PFAM=1-2 TI PA FAM

L4 ANSWER 1 OF 786 WPI INDEX COPYRIGHT 2013 THOMSON REUTERS on STN
FAMILY 1
TI Whole bamboo plywood useful in bottom plate of container, doors and windows, furniture, automobile, and ship berth, comprises a phenolic laminated paper, a bamboo mat long plate, a bamboo curtain short plate, and a bamboo curtain long plate
PA (DEQI-N) DEQING DESEN WOOD IND CO LTD
PI CN 202517539 U 20121107 (201320)* ZH 7[2]
ADT CN 202517539 U CN 2011-20436809U 20111104
PRAI CN 2011-20436809U 20111104

L4 ANSWER 3 OF 786 WPI INDEX COPYRIGHT 2013 THOMSON REUTERS on STN
FAMILY 2
TI Agent used for polishing furniture, comprises specified amount of silicon carbide oil, hard wax, oleic acid, triethanolamine, gasoline, dimethyl silicone polymer, coconut oil diethanolamide, and water
PA (HAI-A-N) HAIAN GUOLI HAIAN GUOLI CHEM IND CO LTD
PI CN 102702980 A 20121003 (201317)* ZH 3[0]
ADT CN 102702980 A CN 2012-10203424 20120620
PRAI CN 2012-10203424 20120620

These are documents that have no equivalent.

=> D PFAM=8 1-2 TI PA FAM

L4 ANSWER 15 OF 786 WPI INDEX COPYRIGHT 2013 THOMSON REUTERS on STN
FAMILY 8
TI Amino plastic used for decorating e.g. furniture, comprises raw material having melamine formaldehyde resin, urea resin, and mixture of plant straw fiber, cotton scrap fiber, fruit husk powder, bone meal and starch, and inorganic material
PA (CHEN-I) CHEN T
PI CN 102558761 A 20120711 (201268)* ZH 4[0]
ADT CN 102558761 A CN 2010-10624211 20101231
PRAI CN 2010-10624211 20101231

L4 ANSWER 16 OF 786 HCAPLUS COPYRIGHT 2013 ACS on STN FAMILY 8
TI Environmental friendly amino plastic and its production method
PA Peop. Rep. China
AN 2012:1019583 HCAPLUS
DN 157:230764
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
PI CN 102558761 A 20120711 CN 2010-10624211 20101231
CN 2010-10624211 20101231

These are documents that have no equivalent.

=> D L4 590 TI PA FAM

L4 ANSWER 590 OF 786 HCAPLUS COPYRIGHT 2013 ACS on STN
TI Furniture brightener containing styrene and manufacture method thereof
PA Peop. Rep. China
AN 2013:218763 HCAPLUS
DN 158:333755
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

520
Search examples

PI   CN 102911607         A     20130206    CN 2011-10221285 20110802 <- -

To compare: DUPLICATE does not find all equivalents that were identified by FSORT!

=> DUP REM L3
L5  551 DUP REM L3 (235 DUPLICATES REMOVED

64.1.2 How to use the Patent Family Manager of STN Express

To find the duplicates and display the documents from the multi-file search above the Patent Family Manager is an efficient tool:

Left-click on L3 in the search above; start the Patent Family Manager.

Two options are offered. We choose „Extract the first member...“.

=> FIL WPINDEX, HCAPPLUS

=> DIS SET REN

<table>
<thead>
<tr>
<th>SET PARAMETER</th>
<th>CURRENT</th>
<th>PERMANENT</th>
<th>LOGIN</th>
<th>DEFAULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>RENUMBER</td>
<td>'OFF'</td>
<td>'OFF'</td>
<td>'OFF'</td>
<td>'OFF'</td>
</tr>
</tbody>
</table>

FSORT is run automatically.

=> FSORT L3

SET SMARTSELECT ON
SET COMMAND COMPLETED

SET HIGHLIGHTING OFF
SET COMMAND COMPLETED

SEL L3 1- PN, APPS
L6  SEL L3 1- PN APPS :  2145 TERMS

‘L6’ DELETED
L6  786 FSO L3
Then SORT is run automatically. A new answer set is created from the first answer numbers of each patent family and from the single documents (in several steps).

The new answer set does not contain any duplicates.

### 64.2 Subject search – Example 2

We want to perform a text search in the full-text files, PATDPAFULL, EPFULL, and PCTFULL. To group the retrieved documents by patent family FSORT will be used. The patent numbers will in addition be searched in INPADOCDB, as this file has the priority numbers standardised and continuously updated and allows a comprehensive retrieval of patent families.

Example: Lichtbögen in Bordnetzen (Electric arcs in on-board supply systems) (vehicles, aircrafts, electric vehicles, etc.).

#### 64.2.1 Search in PATDPAFULL, EPFULL und PCTFULL

```bash
=> FIL PATDPAFULL EPFULL PCTFULL
FILE 'PATDPAFULL' ENTERED
COPYRIGHT (C) 2013 DPMA
```
After SET MSTEPS ON a search generates L-numbers for each file.

(S) proximity is used to link both aspects of this search (arcs and on-board systems).

Some of the documents are grouped by FSORT.
Guide to STN Patent Databases

AI EP 2004-805049 A 20041229
PRAI DE 2004-102004004623 A 20040129

L5 ANSWER 29 OF 162 PCTFULL COPYRIGHT 2013 LNU on STN FAMILY 14
T I E N FUEL CELL SYSTEM FOR A SUBMARINE
T I F R SYSTEME DE PILES A COMBUSTIBLE POUR SOUS-MARIN
T I D E BRENnstoffzelleneinrichtung fuer ein u-boot
P A SIEMENS AKTIENGESELLSCHAFT, Wittelsbacherplatz 2, 80333 Muenchen, DE,
[NAT: DE, RES: DE], for all designated states except US
P I WO 2005073075 A1 20050811
AI WO 2004-EP53724 20041229
PRAI DE 2004-102004004623 20040129

To find all equivalents INPADOCDB is involved.

=> FILE INPADOCDB
FILE 'INPADOCDB' ENTERED
COPYRIGHT (C) 2013 European Patent Office / FIZ Karlsruhe

=> TRANSFER L4 1. PN
L6 TRANSFER L4 1. PN: 163 TERMS
L7 163 L6

SET DUPORDER FILE causes the number of duplicates per file to be displayed when DUPLICATE is invoked.

=> SET DUPORDER FILE
SET COMMAND COMPLETED

=> DUPLICATE IDENTIFY L5 L7
FILE 'PATDPAFULL' ENTERED
COPYRIGHT (C) 2013 DPMA

FILE 'EPFULL' ENTERED
COPYRIGHT (C) 2013 European Patent Office / FIZ Karlsruhe / LexisNexis Univentio B.V.

FILE 'PCTFULL' ENTERED
COPYRIGHT (C) 2013 LexisNexis Univentio B.V.

FILE 'INPADOCDB' ENTERED
COPYRIGHT (C) 2013 European Patent Office / FIZ Karlsruhe

L8 325 DUPLICATE IDENTIFY L5 L7 (INCLUDES 124 SETS OF DUPLICATES)
ANSWERS '1-108' FROM FILE PATDPAFULL
ANSWERS '109-136' FROM FILE EFPULL
ANSWERS '137-162' FROM FILE PCTFULL
ANSWERS '163-325' FROM FILE INPADOCDB

FSORT identifies 117 patent families, compared to 113 without INPADOCDB before. D PFAM 1-- would only display 117 documents.

=> FSORT L8
L9 325 FSO L8

117 Multi-record Families Answers 1-325
Family 1 Answers 1-2
Family 2 Answers 3-4
Family 3 Answers 5-6
Family 4 Answers 7-8
Family 5 Answers 9-10
... Family 28 Answers 69-72
... Family 117 Answers 324-325
0 Individual Records
0 Non-patent Records
0 Non-patent Records
Search examples

This is an example where the standardised priority numbers in INPADOCDB helped to identify an equivalent (priority numbers are not standardised in PCTFULL).

64.2.2 How to use the Patent Family Manager of STN Express

Rather than FSORT the Patent Family Manager is now used to sort L8. The second option is shown: „Customize display of patent family results“. The first document of a patent family is displayed with BIB AB, all further documents with TI only. Since the database opened first was PATDPAFULL, most documents displayed with BIB AB come from this database.

Note: If this option is used, the display of the documents cannot be interrupted. Even the display of the expected display price (after SET NOTICE DISPLAY), which would allow to stop, is switched off.
Guide to STN Patent Databases

=> FIL PATDPFULL, EPFULL, PCTFULL, INPADOCDB
FILE 'PATDPFULL' ENTERED
COPYRIGHT (C) 2013 DPMA

FILE 'EPFULL' ENTERED
COPYRIGHT (C) 2013 European Patent Office / FIZ Karlsruhe / LexisNexis Univentio B.V.

FILE 'PCTFULL' ENTERED
COPYRIGHT (C) 2013 LexisNexis Univentio B.V.

FILE 'INPADOCDB' ENTERED
COPYRIGHT (C) 2013 European Patent Office / FIZ Karlsruhe

=> FSORT L8
SEL L8 1- PN, APPS
L10         SEL L8 1- PN APPS : 349 TERMS

'L10' DELETED
L10         325 FSO L8

117 Multi-record Families Answers 1-325
 Family 1 Answers 1-2
 Family 2 Answers 3-4
 Family 3 Answers 5-6
...
 Family 117 Answers 324-325

0 Individual Records
0 Non-patent Records

=> DIS L10 PFAM=1 1 LIB, AB
L10         ANSWER 1 OF 325 PATDPFULL COPYRIGHT 2013 DPMA on STN DUPLICATE 1

AN DE102012201123 PATDPFULL ED 20130321 EW 201312
TI Gewinkelter Hochvolt-Stecker
IN Saller, Robert, 84546, Egglkofen, DE; Wimmer, Christian, 84175, Schalkham, DE; Wimmer, Stefan, 84098, Hohenthann, DE
PA Lisa Draexlmaier GmbH, 84137, Vilsbiburg, DE
AG HOFFMANN - EITLE, 81925, Muenchen, DE
DT Patent
PT DEB3 Patentschrift als 1. Publikation (ohne vorherige Offenlegungsschrift)
PTX DEB3-070 PATENTTSCHRIFT, (UEBERROLLTE OS) NEUES RECHT
PI DE 102012201123 B3 20130321
AI DE 2012-102012201123 A 20120126
PRAI DE 2012-102012201123 A 20120126 *
AB Gewinkelter Hochvolt-Stecker (1) zur Verwendung im Bordnetz von
Search examples

Kraftfahrzeugen mit einem Aussenleiter (3.1, 3.2) und einem Innenleiter (5.1, 5.2) die in einem elektrisch isolierenden, einstueckigen Gehaeuse ...

=> DIS L10 PFAM=1 2·TOT TI

L10 ANSWER 2 OF 325  INPADOCDB COPYRIGHT 2013 EPO/FIZ KA on STN FAMILY DUPLICATE 1
TI Gewinkelter Hochvolt-Stecker.

=> DIS L10 PFAM=2 1 B1B,AB

L10 ANSWER 3 OF 325 PATDPAFULL COPYRIGHT 2013 DPMA on STN DUPLICATE 2
AN DE102011079547 PATDPAFULL ED 20130124 EW 201304
TI Vorrichtung und Verfahren zum Ansteuern eines Relais in einem Fahrzeug
IN Fuessl, Peter, 84137, Vilsbiburg, DE
PA Lisa Draexlmaier GmbH, 84137, Vilsbiburg, DE
AG HOFFMANN - EITL, 81925, Muenchen, DE
DT Patent
PIT DEA1 Document laid open (first publication)
PITX DEA1·406 OFFENLEGUNGSSCHRIFT, 8-MONATS-AKTEN
PI DE 102011079547 A1 20130124
AI DE 2011-102011079547 A 20110721
PRAI DE 2011-102011079547 A 20110721 *
AB Die vorliegende Erfindung betrifft eine Vorrichtung (10) und ein Verfahren zum Ansteuern eines Relais eines Fahrzeugs mit einer Spule (21) und einem Anker (22), die eine Haltespannung bzw. einen Haltestrom ...

=> DIS L10 PFAM=2 2·TOT TI

L10 ANSWER 4 OF 325 INPADOCDB COPYRIGHT 2013 EPO/FIZ KA on STN FAMILY DUPLICATE 2
TI Vorrichtung und Verfahren zum Ansteuern eines Relais in einem Fahrzeug.

64.3 Search by name (Using the EXPAND command)

This example is to show how to use EXPAND in a multi-file search.

STNINDEX can be used to check for name entries.

=> INDEX WPINDEX HCAPL
INDEX 'WPINDEX, HCAPLUS' ENTERED
2 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

=> SET DETAIL ON
SET COMMAND COMPLETED

=> SET DETAIL ON
SET COMMAND COMPLETED

Using EXPAND we can see the various spellings of the patent assignee name and how often they occur in the selected databases.

=> E BIOLITEC/PA 13
E# FILE FREQUENCY TERM
-- -------- ----- ------
E1 WPINDEX 1 BIOLITE LLC/PA
E2 WPINDEX 1 BIOLITE LTD/PA
E3 28 --> BIOLITEC/PA
WPINDEX 18 BIOLITEC/PA
HCAPLUS 10 BIOLITEC/PA
E4 HCAPLUS 1 BIOLITEC A G/PA

527
Guide to STN Patent Databases

The correct entries are chosen.
The details of the search are shown for each of the databases.

=> S E4-E13
FILE 'WPINDEX'
18 BIOLITEC/PA
0 'BIOLITEC A G'/PA
0 'BIOLITEC A G GERMANY'/PA
4 'BIOLITEC AG'/PA
0 'BIOLITEC AG GERMANY'/PA
3 'BIOLITEC INC'/PA
0 'BIOLITEC INC GERMANY'/PA
0 'BIOLITEC INC USA'/PA
13 'BIOLITEC PHARMA MARKETING LTD'/PA
0 'BIOLITEC PHARMA MARKETING LTD MALAY'/PA
1 'BIOLITEC RES GMBH'/PA
18 (BIOLITEC/PA OR "BIOLITEC A G"/PA OR "BIOLITEC A G GERMANY"/PA OR "BIOLITEC AG"/PA OR "BIOLITEC AG GERMANY"/PA OR "BIOLITEC INC"/PA OR "BIOLITEC INC GERMANY"/PA OR "BIOLITEC INC USA"/PA OR "BIOLITEC PHARMA MARKETING LTD"/PA OR "BIOLITEC PHARMA MARKETING LTD MALAY"/PA OR "BIOLITEC RES GMBH"/PA)

FILE 'HCAPLUS'
10 BIOLITEC/PA
1 'BIOLITEC A G'/PA
1 'BIOLITEC A G GERMANY'/PA
4 'BIOLITEC AG'/PA
3 'BIOLITEC AG GERMANY'/PA
5 'BIOLITEC INC'/PA
3 'BIOLITEC INC GERMANY'/PA
3 'BIOLITEC INC USA'/PA
1 'BIOLITEC PHARMA MARKETING LTD'/PA
1 'BIOLITEC PHARMA MARKETING LTD MALAY'/PA
0 'BIOLITEC RES GMBH'/PA
10 (BIOLITEC/PA OR "BIOLITEC A G"/PA OR "BIOLITEC A G GERMANY"/PA OR "BIOLITEC AG"/PA OR "BIOLITEC AG GERMANY"/PA OR "BIOLITEC INC"/PA OR "BIOLITEC INC GERMANY"/PA OR "BIOLITEC INC USA"/PA OR "BIOLITEC PHARMA MARKETING LTD"/PA OR "BIOLITEC PHARMA MARKETING LTD MALAY"/PA OR "BIOLITEC RES GMBH"/PA)

A SEARCH in STNIndex creates a QUERY.

=> FIL HITS
FILE 'WPINDEX' ENTERED
COPYRIGHT (C) 2013 THOMSON REUTERS
Search examples

FILE 'HCAPLUS' ENTERED AT
COPYRIGHT (C) 2013 AMERICAN CHEMICAL SOCIETY (ACS)

=> S L1
L2 28 L4

64.4 Search by name (Using proximity)

This example is to show how proximity operators can be used in a search for a name in multiple files. Due to the
varying name indexes in the databases one cannot always rely on the right proximity operators to be chosen by the
STN system.

All databases containing patents are opened for STNIndex.

=> INDEX PATENTS
FILE 'ENCOMPPAT' ACCESS NOT AUTHORIZED
FILE 'TULSA' ACCESS NOT AUTHORIZED
INDEX 'AEROSPACE, AUPATFULL, CANPATFULL, CAPLUS, CASREACT, CNFULL, CROPU, DGENE, DPCI, ENCOMPPAT2, EPFULL, FRANCEPAT, FSTPA, GBFULL, IFIALL, IFICLS, IMSPATENTS, INFULL, INPADOCDB, INPAFAMDB, JAPIO, JPFULL, KOREAPAT, LITALERT, NTIS, PATDD, PATDPA, ...'
ENTERED
45 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> SET DETAIL ON
SET COMMAND COMPLETED

The essential parts of the name (with the required truncation)
are searched using (S) proximity.
Detailed display for each of the databases.

=> S (COLGATE (S) PALMOLIVE) / PA
FILE 'AEROSPACE'
252 COLGATE / PA
250 PALMOLIVE / PA
249 (COLGATE (S) PALMOLIVE) / PA

FILE 'AUPATFULL'
2314 COLGATE / PA
2312 PALMOLIVE / PA
2309 (COLGATE (S) PALMOLIVE) / PA

FILE 'CANPATFULL'
2624 COLGATE / PA
2608 PALMOLIVE / PA
2606 (COLGATE (S) PALMOLIVE) / PA

FILE 'CAPLUS'
3616 COLGATE / PA
3619 PALMOLIVE / PA
3608 (COLGATE (S) PALMOLIVE) / PA

FILE 'CASREACT'
6 COLGATE / PA
6 PALMOLIVE / PA
6 (COLGATE (S) PALMOLIVE) / PA

FILE 'CNFULL'
686 COLGATE / PA
682 PALMOLIVE / PA
680 (COLGATE (S) PALMOLIVE) / PA

FILE 'CROPU'
9 COLGATE / PA
9 PALMOLIVE / PA
Guide to STN Patent Databases

FILE 'DGENE'
  14 COLGATE/PA
  14 PALMOLIVE/PA
  14 (COLGATE (S) PALMOLIVE)/PA

FILE 'DPCI'
  3769 COLGATE/PA
  3736 PALMOLIVE/PA
  3734 (COLGATE (S) PALMOLIVE)/PA

FILE 'ENCOMPPAT2'
  197 COLGATE/PA
  197 PALMOLIVE/PA
  196 (COLGATE (S) PALMOLIVE)/PA

FILE 'EPFULL'
  1621 COLGATE/PA
  1617 PALMOLIVE/PA
  1617 (COLGATE (S) PALMOLIVE)/PA

FILE 'FRANCEPAT'
  999 COLGATE/PA
  994 PALMOLIVE/PA
  994 (COLGATE (S) PALMOLIVE)/PA

FILE 'FRFULL'
  1100 COLGATE/PA
  1110 PALMOLIVE/PA
  1094 (COLGATE (S) PALMOLIVE)/PA

FILE 'FSTA'
  10 COLGATE/PA
  10 PALMOLIVE/PA
  10 (COLGATE (S) PALMOLIVE)/PA

FILE 'GBFULL'
  1193 COLGATE/PA
  1178 PALMOLIVE/PA
  1174 (COLGATE (S) PALMOLIVE)/PA

FILE 'IFICLASS'
  4761 COLGATE/PA
  4750 PALMOLIVE/PA
  4746 (COLGATE (S) PALMOLIVE)/PA

FILE 'IFICLASS'
  1561 COLGATE/PA
  1517 PALMOLIVE/PA
  1517 (COLGATE (S) PALMOLIVE)/PA

FILE 'IMSPATENTS'
  0 COLGATE/PA
  0 PALMOLIVE/PA
  0 (COLGATE (S) PALMOLIVE)/PA

FILE 'INFULL'
  582 COLGATE/PA
  574 PALMOLIVE/PA
  568 (COLGATE (S) PALMOLIVE)/PA

FILE 'INPADOCDB'
  34133 COLGATE/PA
  33999 PALMOLIVE/PA
  33909 (COLGATE (S) PALMOLIVE)/PA

FILE 'INPAFAMDB'
  5989 COLGATE/PA
  5910 PALMOLIVE/PA
**64.5 Patent records in different databases**

A search by Patent Assignee should be done in INPADOC as this file has the broadest country coverage of all files. After this search the documents should be displayed in DWPI if they are available there to view the content of the patent. Additionally, information on the content should be retrieved for older German utility models.

=> FILE INPADOCDB
FILE 'INPADOCDB' ENTERED
COPYRIGHT (C) 2007 European Patent Office / FIZ Karlsruhe

---

532
Search examples

With SET AUDIT ON terms with no hits from TRANSFER will be captured. These terms can then be used for another search in another file.

==> SET AUDIT ON
SET COMMAND COMPLETED

==> S (OETKER *(S) (AUGUST OR NAHRUNG?))//PA,PAS
L1 226 (OETKER *(S) (AUGUST OR NAHRUNG?))//PA,PAS

==> FIL WPINDEX
FILE 'WPINDEX' ENTERED
COPYRIGHT (C) 2007 THE THOMSON CORPORATION

The search result from INPADOC is TRANSFERred to DWPI. L3 holds the answer set with hits, L4 holds a QUERY for the terms with no hits in DWPI.

==> TRANSFER L1 1- PN
L2 TRANSFER L1 1- PN : 226 TERMS
L3 53 L2
L4 QUE TERMS FROM L2 WITH NO HITS: 107 TERMS

==> D L3 1-6 TI
L3 ANSWER 1 OF 53 WPINDEX COPYRIGHT 2007 THE THOMSON CORP on STN
TI Baked good comprises bottom layer of dough, second layer of fat preparation or emulsion, third layer of liquid to intrinsically viscous ingredient, and fourth layer of used baked good toppings
L3 ANSWER 2 OF 53 WPINDEX COPYRIGHT 2007 THE THOMSON CORP on STN
TI Pudding or cream dessert has flecks of other foodstuffs of different colors on its surface
L3 ANSWER 3 OF 53 WPINDEX COPYRIGHT 2007 THE THOMSON CORP on STN
TI Dry mix for preparing finished dessert by mixing with liquid contains thickener, dispersant, milk constituents and optionally carbohydrate sweetener and/or emulsifier
L3 ANSWER 4 OF 53 WPINDEX COPYRIGHT 2007 THE THOMSON CORP on STN
TI Production of a crystalline food gelling or thickening agent comprises mixing a sugar with a gelling or thickening agent, wetting a sugar with water and/or alcohol and mixing the two products
L3 ANSWER 5 OF 53 WPINDEX COPYRIGHT 2007 THE THOMSON CORP on STN
TI Dessert, especially a pudding or cream based product, contains visible spots which consist of a product other than the cream
L3 ANSWER 6 OF 53 WPINDEX COPYRIGHT 2007 THE THOMSON CORP on STN
TI Production of a cereal-fruit mixture, especially muesli, comprises immersing fresh or freeze-dried fruit in a sugar solution before adding it to a cereal mixture

==> D L3 5 ALL
L3 ANSWER 5 OF 53 WPINDEX COPYRIGHT 2007 THE THOMSON CORP on STN
AN 2004-341655 [32] WPINDEX
DNC C2004-1298896 [32]
TI Dessert, especially a pudding or cream based product, contains visible spots which consist of a product other than the cream
DC D13
PA (BUDE-C) OETKER NAHRUNGSMITTEL KG AUGUST
CYC 1
PI DE 20316791 U1 20040422 (200432) DE 3[0]

German utility models are available in DWPI from 1996.

533
NOVELTY - A dessert, especially a pudding or cream based product, which can be whisked, contains visible spots which consist of a product other than the cream. The spots are circular. The product phases have differing viscosities, and the pH of the individual phases lies between 3 and 7.2. The dessert is produced using a container which is raised before filling, and at least two filling nozzles.

USE - The product is a dessert, especially a pudding or cream based product

ADVANTAGE - The dessert is simple to produce.
Search examples

These are the documents that were neither available in DWPI nor in PATDPA. (DWPI does not cover some publication kind codes, e.g. A0.)

<table>
<thead>
<tr>
<th>TERM #</th>
<th>TERMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AT180387T/PN</td>
</tr>
<tr>
<td>2</td>
<td>AT253828T/PN</td>
</tr>
<tr>
<td>3</td>
<td>AT295688T/PN</td>
</tr>
<tr>
<td>4</td>
<td>AT296547T/PN</td>
</tr>
<tr>
<td>5</td>
<td>AT301447/PN</td>
</tr>
<tr>
<td>6</td>
<td>BE753643/PN</td>
</tr>
<tr>
<td>7</td>
<td>CH286480/PN</td>
</tr>
<tr>
<td>8</td>
<td>CH286481/PN</td>
</tr>
<tr>
<td>9</td>
<td>CH286482/PN</td>
</tr>
<tr>
<td>10</td>
<td>CH303263/PN</td>
</tr>
<tr>
<td>11</td>
<td>CH321851/PN</td>
</tr>
<tr>
<td>12</td>
<td>CH335935/PN</td>
</tr>
<tr>
<td>13</td>
<td>CH344291/PN</td>
</tr>
<tr>
<td>14</td>
<td>CH371674/PN</td>
</tr>
<tr>
<td>15</td>
<td>CH508522/PN</td>
</tr>
<tr>
<td>16</td>
<td>CH524987/PN</td>
</tr>
<tr>
<td>17</td>
<td>DE1004030/PN</td>
</tr>
<tr>
<td>18</td>
<td>DE1012271/PN</td>
</tr>
<tr>
<td>19</td>
<td>DE1013953/PN</td>
</tr>
<tr>
<td>20</td>
<td>DE1019155/PN</td>
</tr>
<tr>
<td>21</td>
<td>DE1058350/PN</td>
</tr>
<tr>
<td>22</td>
<td>DE1093348/PN</td>
</tr>
<tr>
<td>23</td>
<td>DE1096732/PN</td>
</tr>
<tr>
<td>24</td>
<td>DE1114696/PN</td>
</tr>
<tr>
<td>25</td>
<td>DE1114787/PN</td>
</tr>
<tr>
<td>26</td>
<td>DE1151168/PN</td>
</tr>
<tr>
<td>27</td>
<td>DE1171717/PN</td>
</tr>
<tr>
<td>28</td>
<td>DE1173779/PN</td>
</tr>
<tr>
<td>29</td>
<td>DE1173780/PN</td>
</tr>
<tr>
<td>30</td>
<td>DE1711725U/PN</td>
</tr>
<tr>
<td>31</td>
<td>DE1808566U/PN</td>
</tr>
<tr>
<td>32</td>
<td>DE1846557U/PN</td>
</tr>
<tr>
<td>33</td>
<td>DE1889511U/PN</td>
</tr>
<tr>
<td>34</td>
<td>DE834079/PN</td>
</tr>
<tr>
<td>35</td>
<td>DE836788/PN</td>
</tr>
<tr>
<td>36</td>
<td>DE837834/PN</td>
</tr>
<tr>
<td>37</td>
<td>DE896290/PN</td>
</tr>
<tr>
<td>38</td>
<td>DE975577/PN</td>
</tr>
<tr>
<td>39</td>
<td>DK1060669/PN</td>
</tr>
<tr>
<td>40</td>
<td>FR1018909/PN</td>
</tr>
<tr>
<td>41</td>
<td>FR1039818/PN</td>
</tr>
<tr>
<td>42</td>
<td>FR1041128/PN</td>
</tr>
<tr>
<td>43</td>
<td>FR1045893/PN</td>
</tr>
<tr>
<td>44</td>
<td>FR11219640/PN</td>
</tr>
<tr>
<td>45</td>
<td>FR1195899/PN</td>
</tr>
<tr>
<td>46</td>
<td>FR1206490/PN</td>
</tr>
<tr>
<td>47</td>
<td>FR1207975/PN</td>
</tr>
<tr>
<td>48</td>
<td>FR1305239/PN</td>
</tr>
<tr>
<td>49</td>
<td>FR1373902/PN</td>
</tr>
<tr>
<td>50</td>
<td>FR1382926/PN</td>
</tr>
<tr>
<td>51</td>
<td>FR2058939/PN</td>
</tr>
<tr>
<td>52</td>
<td>FR2065859/PN</td>
</tr>
<tr>
<td>53</td>
<td>FR2121858/PN</td>
</tr>
<tr>
<td>54</td>
<td>FR70468/PN</td>
</tr>
<tr>
<td>55</td>
<td>GB0412754A/PN</td>
</tr>
<tr>
<td>56</td>
<td>GB1113613/PN</td>
</tr>
<tr>
<td>57</td>
<td>GB808122/PN</td>
</tr>
<tr>
<td>58</td>
<td>GB813138/PN</td>
</tr>
<tr>
<td>59</td>
<td>GB888687/PN</td>
</tr>
<tr>
<td>60</td>
<td>GB900055/PN</td>
</tr>
<tr>
<td>61</td>
<td>GB901712/PN</td>
</tr>
<tr>
<td>62</td>
<td>GB918499/PN</td>
</tr>
</tbody>
</table>
64.6 **Cross-file search with overlapping numbers**

Transferring patent numbers between CAPLUS, DWPI and INPADOCDB may sometimes cause trouble, in particular if there are JP, CN, or TW patents in the search result. This is caused by overlapping serial numbers for different types of publications, which makes the respective publication numbers ambiguous. The search result can be greatly enhanced by using the PNK (publication number + publication kind code) field rather than the PN (patent number) field in a cross-file search.

Searching the Chinese number CN 1127574 results in different patent families being retrieved in CAPLUS and DWPI.

---

**Guide to STN Patent Databases**

63 GB929554/PN  
64 GB939928/PN  
65 GB971918/PN  
66 GB988339/PN  
67 GB995330/PN  
68 HR2000000403/PN  
69 HR2002001002/PN  
70 HR2004000603/PN  
71 IT8454168U/PN  
72 IT9100538/PN  
73 PL340748/PN  
74 PL358648/PN  
75 PL368876/PN  
76 SI20238/PN  
77 SI21118/PN  
78 SI285718/PN  
79 TR2000001786/PN

******** END OF L6 ********

=> S L6
L7 79 L6
ALL TERMS IN L6 RETRIEVED.

---

**Guide to STN Patent Databases**

Search the Chinese number CN 1127574 results in different patent families being retrieved in CAPLUS and DWPI.
We now show the different results between using PN and PNK.

=> FIL CAPLUS

=> S (EVONIK OR DEGUSSA)/PA AND C12N/IPC AND CN/PC
L3 114 (EVONIK OR DEGUSSA)/PA AND C12N/IPC AND CN/PC

=> FIL WPINDEX

The patent numbers from the CAPLUS result are now transferred to DWPI.

=> TRANSFER L3 1- PN
L4 TRANSFER L3 1- PN : 1016 TERMS
L5 122 L4

=> D L4 1- WITH "CN"
L4 TRA L3 1- PN : 1016 TERMS

TERM # TERMS

-----------
182 CN100336901/PN
183 CN100347190/PN
184 CN100351387/PN
185 CN100352926/PN
186 CN100359002/PN
187 CN100368545/PN
188 CN100387714/PN
...

=> S L5 AND (EVONIK OR DEGUSSA)/PA
L6 110 L5 AND (EVONIK OR DEGUSSA)/PA

=> S L5 NOT L6
L7 12 L5 NOT L6

Our check shows that there are completely different families in the new search result. Only the patent assignees are displayed.

=> D 1-6 PA

L7 ANSWER 1 OF 12 WPINDEX COPYRIGHT 2011 THOMSON REUTERS on STN
PA (STRA-1) STRASSER J

L7 ANSWER 2 OF 12 WPINDEX COPYRIGHT 2011 THOMSON REUTERS on STN
PA (FANG-1) FANG Z

L7 ANSWER 3 OF 12 WPINDEX COPYRIGHT 2011 THOMSON REUTERS on STN
PA (SCLO-C) SMS DEMAG AG

L7 ANSWER 4 OF 12 WPINDEX COPYRIGHT 2011 THOMSON REUTERS on STN
PA (HUKK-1) HUK K

L7 ANSWER 5 OF 12 WPINDEX COPYRIGHT 2011 THOMSON REUTERS on STN
PA (GIUL-C) BK GIULINI CHEM GMBH & CO OHG; (GIUL-C) BK GIULINI GMBH

L7 ANSWER 6 OF 12 WPINDEX COPYRIGHT 2011 THOMSON REUTERS on STN
PA (EGST-N) EGSTON EGGENBURGER SYSTEM ELEKTRONIK GMB

=> FIL CAPLUS

=> S (EVONIK OR DEGUSSA)/PA AND C12N/IPC AND CN/PC
L8 114 (EVONIK OR DEGUSSA)/PA AND C12N/IPC AND CN/PC
We use PNK rather than PN.

```
=\> \texttt{FIL WPIND}

=\> \texttt{TRA L8 1- PNK}
L9 TRANSFER L8 1- PNK : 1121 TERMS
L10 110 L9

=\> \texttt{D L9 1- WITH "CN"}
L9 TRANSFER L8 1- PNK : 1121 TERMS

\begin{center}
\textbf{TERM # TERMS}
\end{center}
\begin{center}
\begin{tabular}{ll}
\hline
184 & CN100336901 C/PNK \\
185 & CN100347190 C/PNK \\
186 & CN100351387 C/PNK \\
187 & CN100352926 C/PNK \\
188 & CN100359002 C/PNK \\
189 & CN100368545 C/PNK \\
190 & CN100387714 C/PNK \\
191 & CN100443592 C/PNK \\
\hline
\end{tabular}
\end{center}

\ldots

=\> \texttt{S L10 AND (EVONIK OR DEGUSSA)/PA}
2068 EVONIK/PA
4922 DEGUSSA/PA
L11 110 L10 AND (EVONIK OR DEGUSSA)/PA

```

Now we have the correct patent assignee in all patent families.

```
=\> \texttt{S L10 NOT L11}
L12 0 L10 NOT L11
```
65 ANALYZE tool examples

65.1 Example 1 – One Field Analysis

We want to do a company analysis of Junghans in the DWPI file (IPC.CI, PRYF, PC, IN fields).

Excel should already be open.

=> FIL WPINDEX
FILE ‘WPINDEX’ ENTERED
COPYRIGHT (C) 2007 THE THOMSON CORPORATION

=> SET IFORMAT ON

=> S JUNN/ PACO
L1 277 JUNN/ PACO
(JUNN/ PACO)

First we execute an ANALYZE command. All desired fields can be entered in one go.

=> ANALYZE L1 1- IPC.CI LEN 8 PRYF PC IN
L2 ANALYZE L1 1- IPC.CI PRYF PC IN LEN 8 : 293 TERMS

Clicking on L2 (left click) opens a wizard where you choose ANALYZE PLUS. This produces the dialog below. All the fields used in the previous ANALYZE command are already shown. Just choose One field analysis. The analysis is then performed one at a time for each field.
Clicking Options produces this dialog:

Select the number of Terms to view and the Sort order.

For the IPC.CI and IN fields the number of terms should be set to 10 or 20 and ‘by frequency’ should be selected as sort order. For the PRYF field all terms are needed and the sort order should be ‘alphanumerically’ (it is not possible to limit the analysis to the latest years only).

When you click OK the previous dialog will reappear and you can start the analysis by clicking ANALYZE. As the option ‘Capture Delimited Tabulation Data for Later Use’ was activated you will get a file-save dialog to create a .TBN file. Having saved the data you can later use them to create new diagrams at any time.

The Data Group Tool will be displayed next. You have to decide whether to group any terms or not.
Search examples

In our example there is no need to group the data captured from the IPC.CI and PC fields. However, due to varying spellings it is a good idea to group the entries from the IN field. In PRYF one could e.g. put the years up to 1990 in one group and only analyse the most recent years individually. This will not be done in this example — the most recent years will simply be selected later.

After analysis the Excel file will be created: Workbook1 with Cross-Tab, 3D column and sheet 1 with diagram 1 and table 1. All 4 presentations are shown here for the IPC.CI field, but only 3D column diagrams for the other fields.

**IPC.CI field:**

Table 1:

<table>
<thead>
<tr>
<th>Code</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>G04c0003</td>
<td>30</td>
</tr>
<tr>
<td>F42c0015</td>
<td>23</td>
</tr>
<tr>
<td>G04c0010</td>
<td>16</td>
</tr>
<tr>
<td>F42c0009</td>
<td>13</td>
</tr>
<tr>
<td>G04g0001</td>
<td>12</td>
</tr>
<tr>
<td>G04c0021</td>
<td>11</td>
</tr>
<tr>
<td>G04g0007</td>
<td>11</td>
</tr>
<tr>
<td>G04c0013</td>
<td>10</td>
</tr>
<tr>
<td>G04b0019</td>
<td>9</td>
</tr>
<tr>
<td>G04b0037</td>
<td>9</td>
</tr>
</tbody>
</table>

Diagram 1 (Excel diagram):

![Analysis of "IPC.CI"](image)
Cross-Tab:

<table>
<thead>
<tr>
<th>Class</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>G04c0003</td>
<td>30</td>
</tr>
<tr>
<td>F42c0015</td>
<td>23</td>
</tr>
<tr>
<td>G04c0010</td>
<td>16</td>
</tr>
<tr>
<td>F42c0009</td>
<td>13</td>
</tr>
<tr>
<td>G04g0001</td>
<td>12</td>
</tr>
<tr>
<td>G04c0021</td>
<td>11</td>
</tr>
<tr>
<td>G04g0007</td>
<td>11</td>
</tr>
<tr>
<td>G04c0013</td>
<td>10</td>
</tr>
<tr>
<td>G04b0019</td>
<td>9</td>
</tr>
<tr>
<td>G04b0037</td>
<td>9</td>
</tr>
</tbody>
</table>

3D column:

![3D column chart](image-url)
PC field:

IN field:
**PRYF field:**

Here is the whole Excel screen to show how to limit the display to part of the list: Simply choose the start year from the menu.

![Excel screen showing how to limit the display to part of the list](image)

The Cross-Tab can even be edited (the connection to the documents is retained there), e.g. the years 1962 to 1989 could be grouped.

### 65.2 Example 2 – Two Field Analysis

For the field A45F — Travelling or Camp Equipment the most active patent applicants with details on the development over time (by priority years) are wanted.

=> FIL WINDEX

```plaintext
=> S A45F/IPC(S)(I OR ICM OR ICS)/IPC.KW AND PRYF>=1998
10113 A45F/IPC
7591984 I/IPC.KW
9093992 ICM/IPC.KW
5546397 ICS/IPC.KW
9455 A45F/IPC(S)(I OR ICM OR ICS)/IPC.KW
5404110 PRYF>=1998
```

Now the ANALYZE command is invoked. This produces a table with the patent assignees sorted by frequency. This ANALYZE command does not cause extra cost (ANALYZE PLUS is always preceded by ANALYZE or TABULATE).

```plaintext
=> ANALYZE L1 1- PAX PRYF
L2 ANALYZE L1 1- PAX PRYF: 3127 TERMS
```
The first entries of the patent assignee list are displayed and printed in order to help in the data grouping later when ANALYZE PLUS is performed.

<table>
<thead>
<tr>
<th>TERM #</th>
<th>OCC</th>
<th>DOC</th>
<th>% DOC</th>
<th>PAX</th>
<th>PRYF</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>17</td>
<td>17</td>
<td>0.43</td>
<td>TRAV-NI TRAVEL CADDY INC DBA TRAVELON</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>16</td>
<td>16</td>
<td>0.41</td>
<td>TRAV-NI TRAVEL CADDY INC</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>12</td>
<td>0.30</td>
<td>ELEP-NI ELEPHANT MAHOHBI N KK</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>12</td>
<td>12</td>
<td>0.30</td>
<td>SALO-CI SALOMON SA</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>11</td>
<td>11</td>
<td>0.28</td>
<td>BLDE-CI BLACK &amp; DECKER I NC</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>11</td>
<td>11</td>
<td>0.28</td>
<td>LAFU-NI LAFUMA SA</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>11</td>
<td>11</td>
<td>0.28</td>
<td>LBRE-I LE BRETON Y</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>11</td>
<td>11</td>
<td>0.28</td>
<td>ORTL-I ORTLIEB H</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>10</td>
<td>10</td>
<td>0.25</td>
<td>AMAZ-NI AMAZONAS GMBH</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>10</td>
<td>10</td>
<td>0.25</td>
<td>MI ZS-CI MI ZUNO SPORTING GOODS CO LTD</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>10</td>
<td>10</td>
<td>0.25</td>
<td>SKI-SI SKIS ROSSI GNOL SA</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>9</td>
<td>9</td>
<td>0.23</td>
<td>MOTO-CI MOTOROLA I NC</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>9</td>
<td>9</td>
<td>0.23</td>
<td>SALV-I SALVADOR J E</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>7</td>
<td>7</td>
<td>0.18</td>
<td>ANGU-I ANGUS J</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>7</td>
<td>7</td>
<td>0.18</td>
<td>CAME-NI CAMELBAK PROD LLC</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>7</td>
<td>7</td>
<td>0.18</td>
<td>CRAG-I CRAGO J V</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>7</td>
<td>7</td>
<td>0.18</td>
<td>GORS-I GORSKI E</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>7</td>
<td>7</td>
<td>0.18</td>
<td>I L L T-C I L L I NO I S TOOL WORKS I NC</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>7</td>
<td>7</td>
<td>0.18</td>
<td>KARS-NI KARSTEN MFG CORP</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>7</td>
<td>7</td>
<td>0.18</td>
<td>MEYE-I MEYER D E</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>7</td>
<td>7</td>
<td>0.18</td>
<td>YANG-I YANG S</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>6</td>
<td>6</td>
<td>0.15</td>
<td>COND-I CONDIF T</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>6</td>
<td>6</td>
<td>0.15</td>
<td>DI TG-I DITGES N</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>6</td>
<td>6</td>
<td>0.15</td>
<td>HATT-NI HATTERAS HAMMOCKS I NC</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>6</td>
<td>6</td>
<td>0.15</td>
<td>OETT-I OETTE B</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>6</td>
<td>6</td>
<td>0.15</td>
<td>PRAT-I PRATT M J</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>6</td>
<td>6</td>
<td>0.15</td>
<td>SI EI-CI SIEMENS AG</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>6</td>
<td>6</td>
<td>0.15</td>
<td>TATE-I TATE A</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>BADI-I BADIO P</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>ELEX-CI ELECTROLUX AB</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>FORS-I FORSMAN B A</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>GODS-I GODSHAW D E</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>IK ED-NI IKEDA CHIKYU KK</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>KTDW-NI K-2 CORP</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>KYAM-NI KYAMERU KK</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>MUEH-NI MUEHLBERGER GMBH</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>NISH-NI NISHIKI TABI KK</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>REI IN-NI RES I N MOTION LTD</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>TRAV-NI TRAVELON</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>5</td>
<td>5</td>
<td>0.13</td>
<td>WILL-I WILLIAMS K</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>AMTE-NI AMTEL TECHNOLOGY PTY LTD</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>ARMA-NI ARMAMENT SYSTEMS &amp; PROCEDURES I NC</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>BERG-NI BERGANS FRITID AS</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>BI AN-NI BIANCHI I NT</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>CALI-NI CALI FORNIA I INNOVATIONS I NC</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>CAME-NI CAMELBAK PROD I NC</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>CHAN-I CHANG C</td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>CHEN-I CHEN C</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>DROS-I DEL ROSSARIO A</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>GOLD-I GOLD N</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>HABE-I HABER R</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>HOLL-I HOLLAND M J</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>I BMC-CI I NT BUSINESS MACHINES CORP</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>KAHN-I KAHN P P</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>LEDR-I LEDRU R</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>LGET-I LE GETTE B E</td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>MATS-NI MATSUZAKA KK</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>MATU-CI MATSUSHITA DENKI SANGYO KK</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>MEDT-CI MEDTRONIC MINIMED INC</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>4</td>
<td>4</td>
<td>0.10</td>
<td>NIFC-CI NIFCO INC</td>
<td></td>
</tr>
</tbody>
</table>
Guide to STN Patent Databases

<table>
<thead>
<tr>
<th>Number</th>
<th>Similarity</th>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>0.10</td>
<td>NIPPON SANSO CORP</td>
</tr>
<tr>
<td>71</td>
<td>0.10</td>
<td>NIKI I NC</td>
</tr>
<tr>
<td>72</td>
<td>0.10</td>
<td>NIKI INT LTD</td>
</tr>
<tr>
<td>73</td>
<td>0.10</td>
<td>NYKOLUK CO</td>
</tr>
<tr>
<td>74</td>
<td>0.10</td>
<td>OERT G</td>
</tr>
<tr>
<td>75</td>
<td>0.10</td>
<td>OKUTOSU YG</td>
</tr>
<tr>
<td>76</td>
<td>0.10</td>
<td>OYNO CORP</td>
</tr>
<tr>
<td>77</td>
<td>0.10</td>
<td>PROM JESTIS</td>
</tr>
<tr>
<td>78</td>
<td>0.10</td>
<td>REISHO TRADING YG</td>
</tr>
<tr>
<td>79</td>
<td>0.10</td>
<td>SHIBNOCO CORP</td>
</tr>
<tr>
<td>80</td>
<td>0.10</td>
<td>SMSCORP</td>
</tr>
<tr>
<td>81</td>
<td>0.10</td>
<td>SPEKSA</td>
</tr>
<tr>
<td>82</td>
<td>0.10</td>
<td>TANAKA M</td>
</tr>
<tr>
<td>83</td>
<td>0.10</td>
<td>TIGERSAFETY INC</td>
</tr>
<tr>
<td>84</td>
<td>0.10</td>
<td>TIGER MAHOBIN KK</td>
</tr>
<tr>
<td>85</td>
<td>0.10</td>
<td>TRG ACCESSORIES LLC</td>
</tr>
<tr>
<td>86</td>
<td>0.10</td>
<td>VAUDE SPORT VON DEWitz ALBRICHT</td>
</tr>
<tr>
<td>87</td>
<td>0.10</td>
<td>WARNER K</td>
</tr>
<tr>
<td>88</td>
<td>0.10</td>
<td>YKK CORP</td>
</tr>
<tr>
<td>89</td>
<td>0.10</td>
<td>YOSHI DA KOGYO KK</td>
</tr>
<tr>
<td>90</td>
<td>0.08</td>
<td>ADRIAND</td>
</tr>
<tr>
<td>91</td>
<td>0.08</td>
<td>AIPN</td>
</tr>
<tr>
<td>92</td>
<td>0.08</td>
<td>ASAPH</td>
</tr>
<tr>
<td>93</td>
<td>0.08</td>
<td>AVER CREDIT</td>
</tr>
<tr>
<td>94</td>
<td>0.08</td>
<td>BOSCH GBH ROBERT</td>
</tr>
<tr>
<td>95</td>
<td>0.08</td>
<td>BRANCH J A</td>
</tr>
<tr>
<td>96</td>
<td>0.08</td>
<td>BROW W</td>
</tr>
<tr>
<td>97</td>
<td>0.08</td>
<td>CHAW KHONG TECHNOLOGY CO LTD</td>
</tr>
<tr>
<td>98</td>
<td>0.08</td>
<td>CHEKRHONE P</td>
</tr>
<tr>
<td>99</td>
<td>0.08</td>
<td>CHEN J</td>
</tr>
<tr>
<td>100</td>
<td>0.08</td>
<td>CHEN M</td>
</tr>
</tbody>
</table>

STN Analyze Plus Wizard

- **One field analysis**
  - Select first field:
    - PA
    - PRYF
  - Group similar terms

- **Two field analysis**
  - Select second field:
    - PA
    - PRYF
  - Group similar terms

Capture delimited tabulation data for later use
The data will be saved to a .TBN file, then the analysis is performed.

Next the table of Patent Assignees and Patent Assignee Codes (PAX field) is displayed. You can concentrate on the most frequent patent assignees here. It is a good idea to save the edited list in order to have the grouped names ready for a later statistical analysis.

The table with priority years below will not be grouped.
Results:

1. Table PAX/PRYF for the 20 most frequent Patent Assignees:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Trav-N) Travel Caddy Inc Dba Travelon</td>
<td>1</td>
<td>9</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(Elep-N) Elephant Mahohbin Kk</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Salo-C) Salomon SA</td>
<td>1</td>
<td></td>
<td>3</td>
<td>5</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Blde-C) Black &amp; Decker Inc</td>
<td>2</td>
<td></td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Lafu-N) Lafuma SA</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Lbre-I) Le Breton Y</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Ortl-I) Ortlieb H</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Amaz-N) Amazonas Gmbh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(Mizs-C) Mizuno Sporting Goods CO Ltd</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Skis-N) Skis Rossignol SA</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Moti-C) Motorola Inc</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Salv-I) Salvador J E</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Angu-I) Angus J</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Came-N) Camelbak Prod Llc</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Will-I) Willows K</td>
<td>1</td>
<td></td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Yang-I) Yang S</td>
<td></td>
<td>1</td>
<td>5</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Crag-I) Cragg J V</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Gors-I) Gorski E</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Illt-C) Illinois Tool Works Inc</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Kars-N) Karsten Mfg Corp</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Diagram 1 (Excel Diagram):

![Excel Diagram](image)

3. Cross-Tab

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Trav-N) Travel Caddy Inc Dba Travelon</td>
<td>1</td>
<td>9</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(Elep-N) Elephant Mahohbin Kk</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Salo-C) Salomon SA</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Blde-C) Black &amp; Decker Inc</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Lafu-N) Lafuma SA</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Lbre-I) Le Breton Y</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Ortl-I) Ortlieb H</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Amaz-N) Amazonas Gmbh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(Mizs-C) Mizuno Sporting Goods CO Ltd</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The diagram can be limited to the most recent years:

<table>
<thead>
<tr>
<th>File &amp; Cost Center</th>
<th>Quantity @ Rate</th>
<th>Estimated Cost</th>
<th>Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home File</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connect Hours</td>
<td>0.01 @ 28.00</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td>0.01 @ 7.00</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>WPINDEX File</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connect Hours</td>
<td>0.08 @ 402.00</td>
<td>32.16</td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td>0.08 @ 7.00</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td>Analyze Level 2</td>
<td>1 @ 16.55</td>
<td>16.55</td>
<td></td>
</tr>
<tr>
<td>Tabulate Executions</td>
<td>1 @ 28.55</td>
<td>28.55</td>
<td></td>
</tr>
<tr>
<td>STNGUIDE File</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet</td>
<td>0.03 @ 7.00</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>Analyze Plus Level 2</td>
<td>1 @ 21.55</td>
<td>21.55</td>
<td></td>
</tr>
</tbody>
</table>

Summary by File and Cost Center

<table>
<thead>
<tr>
<th>File &amp; Cost Center</th>
<th>Hours</th>
<th>Estimated Cost</th>
<th>Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home File</td>
<td>(None)</td>
<td>0.01</td>
<td>0.35</td>
</tr>
<tr>
<td>WPINDEX File</td>
<td>(None)</td>
<td>0.08</td>
<td>77.82</td>
</tr>
<tr>
<td>STNGUIDE File</td>
<td>(None)</td>
<td>0.03</td>
<td>21.76</td>
</tr>
</tbody>
</table>

Costs include telecommunication fees: 0.12 Euros

Summary by: Cost Center

<table>
<thead>
<tr>
<th>File &amp; Cost Center</th>
<th>Hours</th>
<th>Estimated Cost</th>
<th>Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td>(None)</td>
<td>0.12</td>
<td>99.93</td>
<td></td>
</tr>
</tbody>
</table>

Your total session costs are 0.12 Euros in file ‘STNGUIDE’
**Example 3 – Two Field Analysis**

We want to know which companies co-operate in the field of brakes (F16d, B60t).

A database with two patent assignee fields must be used. INPADOCDB is suitable (PA und PAS) and is used here. DWPI with the PAX and PA fields would be okay too.

```plaintext
=> FIL INPADOCDB
```

The sample is taken from the years 2003 to 2008.

```plaintext
=> S (?BREMS? OR BRAKE? OR BRAKING) AND (F16D OR B60T)/IPC(S)(I OR ICM OR ICS)/IPC.KW
```

The search is limited to EP applications so the family size cannot influence the result.

```plaintext
=> S L2 AND (EPA1 OR EPA2)/PK(L)2003-2008/PY
```

The ANALYZE command is invoked and the list of the 100 most frequent PAS is displayed.

```plaintext
=> ANALYZE L2 1- PAS PA
```

```
TERM #   # OCC  # DOC  % DOC PA PAS
------  ------  ------  -------- ------ ------
1     262    262   9.92 BOSCH GMBH ROBERT
3     185    185   7.00 KNORR BREMSE SYSTEME
4     171    171   6.47 CONTINENTAL TEVES AG & CO OHG
8      83     83   3.14 FRENI BREMBO SPA
9      61     61   2.31 HONDA MOTOR CO LTD
10     60     60   2.27 DELPHI TECH INC
12     56     56   2.12 LUCAS AUTOMOTIVE GMBH
15     47     47   1.78 NISSIN KOGYO KK
16     45     45   1.70 NISSAN MOTOR
19     41     41   1.55 TOYOTA MOTOR CO LTD
22     40     40   1.51 SHI MANO KK
23     38     38   1.44 AUDI NSU AUTO UNION AG
25     33     33   1.25 HALDEX BRAKE PROD AB
27     33     33   1.25 HITACHI LTD
28     33     33   1.25 PEUGEOT CITROEN AUTOMOBILES SA
30     31     31   1.17 SIEMENS AG
31     30     30   1.14 MANDO CORP
34     28     28   1.06 BAYERISCHES MOTOREN WERKE AG
35     28     28   1.06 HONEYWELL INT INC
36     28     28   1.06 WABCO GMBH & CO OHG
37     27     27   1.02 DAIMLER CHRYSLER AG
41     26     26   0.98 MERITORE HEAVY VEHICLE BRAKING
42     26     26   0.98 ZAHRNADFAAIBRIK FRIEDRICHSHAFEN
44     25     25   0.95 GOODRICH CORP
46     23     23   0.87 MESSIER BUGATTI
50     21     21   0.79 RENAULT SA
54     19     19   0.72 WABCO GMBH
55     18     18   0.68 BNP BERGISCHE ACHSEN KG
57     18     18   0.68 VOLVO LASTVAGNAB AB
58     17     17   0.64 FORD GLOBAL TECH LLC
60     16     16   0.61 ADVICS CO LTD
61     16     16   0.61 BOSCH ROBERT CORP
62     16     16   0.61 BOSCH SIST DE FRENA DIA CO
64     16     16   0.61 NISSIN SPINNING
67     15     15   0.57 ARVIMERITOR TECHNOLOGY LLC
71     14     14   0.53 FEDERAL MOULTR FRICTION PRODUCT
73     13     13   0.49 AKEBONO CORP NORTH AMERICA
77     12     12   0.45 FUJI HEAVY IND LTD
79     12     12   0.45 KELSEY HAYES CO
81     12     12   0.45 KNORR BREMSE SYSTEME FUER SCHIE
```
ANALYZE-PLUS (Two Field, PAS and PA, full answer set, sort by frequency) is now applied to L4. The PAS list can be used as basis to edit the names. The names should be largely corresponding in the PA and PAS lists.

The result is that e.g. the companies NISSIN and HONDA co-operate in patent applications. A search for the combinations confirms this result:

\[ \Rightarrow S \text{ (NISSIN AND HONDA)/ PA, PAS} \]
\[ L20 \quad 273 \text{ (NISSIN AND HONDA)/ PA, PAS} \]

\[ \Rightarrow S \text{ (NISSIN AND HONDA)/ PA, PAS AND L2} \]
\[ L21 \quad 11 \text{ (NISSIN AND HONDA)/ PA, PAS AND L2} \]

The Cross-Tab in Workbook 1 provides a good overview (see extract below). The names can even be combined in this table. Another sort by frequency is needed. The 3D column diagram changes accordingly.

Only the relevant excerpts from the diagrams are shown.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>O</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bosch GmbH Robert</td>
<td>277</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Knorr Bremse Systeme</td>
<td>1</td>
<td>201</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Continental Tires AG</td>
<td></td>
<td></td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Freri Brembo</td>
<td></td>
<td></td>
<td></td>
<td>69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Honda Motor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>81</td>
<td>11</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Delphi Tech Inc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Wabco GMBH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Haldex Brake Prod</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Toyota</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Lucas Automotive GmbH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Nisssin Kogyo Kk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td>47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Nissan Motor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Audi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Shimano</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Hitachi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>
Surveys
66 Country codes and country coverage of CA, INPADOCDB, INPAFAMDB, DWPI

In the patents field it is customary to work with country codes rather than the full names of countries. This code is allocated by the WIPO (the World Intellectual Property Organisation). These codes are shown in the table below, together with details on the coverage of the individual countries in the international databases. For this survey, single years covered were not included and different publication kinds are not distinguished. For more detailed information please refer to:

- [http://www.cas.org/expertise/cascontent/caplus/patcoverage/patyear.html](http://www.cas.org/expertise/cascontent/caplus/patcoverage/patyear.html)
- [http://scientific.thomson.com/scientific/support/patents/coverage/dwpicovkinds/](http://scientific.thomson.com/scientific/support/patents/coverage/dwpicovkinds/)

<table>
<thead>
<tr>
<th>Code</th>
<th>Country</th>
<th>Land</th>
<th>CAPLUS</th>
<th>INPADOCDB</th>
<th>INPAFAMDB</th>
<th>DWPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP</td>
<td>African Regional Intellectual Property Organisation (ARIPO)</td>
<td>Afrikanische regionale Organisation für geistiges Eigentum (ARIPO)</td>
<td>2000-</td>
<td>1984-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT</td>
<td>Austria</td>
<td>Österreich</td>
<td>1907-</td>
<td>1969-</td>
<td>1975-</td>
<td></td>
</tr>
<tr>
<td>AU</td>
<td>Australia</td>
<td>Australien</td>
<td>1927-</td>
<td>1973-</td>
<td>1963-69, 1983-</td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>Bosnia and Herzegovina</td>
<td>Bosnien–Herzegovina</td>
<td>1998-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td>Belgium</td>
<td>Belgien</td>
<td>1928-</td>
<td>1964-</td>
<td>1963-</td>
<td></td>
</tr>
<tr>
<td>BG</td>
<td>Bulgaria</td>
<td>Bulgarien</td>
<td>2000-</td>
<td>1973-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BY</td>
<td>Belarus</td>
<td>Weißrussland</td>
<td></td>
<td>1997</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>Canada</td>
<td>Canada</td>
<td>1910-</td>
<td>1970-</td>
<td>1963-</td>
<td></td>
</tr>
<tr>
<td>CH</td>
<td>Switzerland</td>
<td>Schweiz</td>
<td>1910-</td>
<td>1969-</td>
<td>1963-</td>
<td></td>
</tr>
<tr>
<td>CL</td>
<td>Chile</td>
<td>Chile</td>
<td>1919</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>Colombia</td>
<td>Kolumbien</td>
<td>1995-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>Costa Rica</td>
<td>Costa Rica</td>
<td>2007-</td>
<td>2007-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CU</td>
<td>Cuba</td>
<td>Cuba</td>
<td>1974-95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CY</td>
<td>Cyprus</td>
<td>Zypern</td>
<td>1975-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CZ</td>
<td>Czech Republic</td>
<td>Tschechische Republik</td>
<td>1993-</td>
<td>1993-</td>
<td>1994-</td>
<td></td>
</tr>
<tr>
<td>DK</td>
<td>Denmark</td>
<td>Dänemark</td>
<td>1909-</td>
<td>1968-</td>
<td>1974-</td>
<td></td>
</tr>
<tr>
<td>DO</td>
<td>Dominican Republic</td>
<td>Dominikanische Republik</td>
<td>2007-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DZ</td>
<td>Algeria</td>
<td>Algerien</td>
<td>2002-04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EA</td>
<td>Eurasian Patent Convention</td>
<td>Eurasischer Patentübereinkunft</td>
<td>1996-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>Ecuador</td>
<td>Ecuador</td>
<td>1990-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE</td>
<td>Estonia</td>
<td>Estland</td>
<td>2000-</td>
<td>1995-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EG</td>
<td>Egypt</td>
<td>Ägypten</td>
<td>2000-</td>
<td>1976-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>Spain</td>
<td>Spanien</td>
<td>1946-</td>
<td>1968-</td>
<td>1983-</td>
<td></td>
</tr>
<tr>
<td>FI</td>
<td>Finland</td>
<td>Finnland</td>
<td>1960-</td>
<td>1968-</td>
<td>1974-</td>
<td></td>
</tr>
<tr>
<td>FR</td>
<td>France</td>
<td>Frankreich</td>
<td>1900-</td>
<td>1968-</td>
<td>1963-</td>
<td></td>
</tr>
<tr>
<td>GB</td>
<td>United Kingdom</td>
<td>Großbritannien</td>
<td>1901-</td>
<td>1968-</td>
<td>1963-</td>
<td></td>
</tr>
<tr>
<td>GC</td>
<td>Cooperative Council of the Arab states of the Gulf</td>
<td>Vereinigung der Golfstaaten</td>
<td>2002-</td>
<td>2002-05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GR</td>
<td>Greece</td>
<td>Griechenland</td>
<td>2000-</td>
<td>1977-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GT</td>
<td>Guatemala</td>
<td>Guatemala</td>
<td>1966-2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HK</td>
<td>Hong Kong</td>
<td>Hongkong</td>
<td>2000-</td>
<td>1976-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR</td>
<td>Croatia</td>
<td>Kroatien</td>
<td>2000-</td>
<td>1994-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Country</td>
<td>Land</td>
<td>CAPLUS</td>
<td>INPADOCDB INPAFAMDB</td>
<td>DWPI</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>------------------</td>
<td>--------</td>
<td>---------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Indonesia</td>
<td>Indonesien</td>
<td>1996–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IL</td>
<td>Israel</td>
<td>Israel</td>
<td>1966–</td>
<td>1968–</td>
<td>1975–</td>
<td></td>
</tr>
<tr>
<td>IN</td>
<td>India</td>
<td>Indien</td>
<td>1946–</td>
<td>1975–</td>
<td>2005–</td>
<td></td>
</tr>
<tr>
<td>IP</td>
<td>Technical disclosure from IP.com</td>
<td>Technische Offenbarung von IP.com</td>
<td>2001–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS</td>
<td>Iceland</td>
<td>Island</td>
<td>1993–2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KE</td>
<td>Kenya</td>
<td>Kenia</td>
<td>1975–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KZ</td>
<td>Kazakhstan</td>
<td>Kasachstan</td>
<td>2004–2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LT</td>
<td>Lithuania</td>
<td>Litauen</td>
<td>1994–</td>
<td>1994–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>Morocco</td>
<td>Marokko</td>
<td>1993–2003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC</td>
<td>Monaco</td>
<td>Monaco</td>
<td>2000–</td>
<td>1975–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD</td>
<td>Moldova, Republic of</td>
<td>Republik Moldavien</td>
<td>2000–</td>
<td>1994–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MN</td>
<td>Mongolia</td>
<td>Mongolei</td>
<td>1972–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MT</td>
<td>Malta</td>
<td>Malta</td>
<td>1967–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MW</td>
<td>Malawi</td>
<td>Malawi</td>
<td>1973–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MY</td>
<td>Malaysia</td>
<td>Malaysia</td>
<td>1953–89</td>
<td>2010–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NI</td>
<td>Nicaragua</td>
<td>Nikaragua</td>
<td>1992–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>Panama</td>
<td>Panama</td>
<td>1996–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE</td>
<td>Peru</td>
<td>Peru</td>
<td>1992–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PL</td>
<td>Poland</td>
<td>Polen</td>
<td>1957–</td>
<td>1973–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM</td>
<td>San Marino</td>
<td>SAN Marino</td>
<td>2000–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SV</td>
<td>El Salvador</td>
<td>El Salvador</td>
<td>2000–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TH</td>
<td>Thailand</td>
<td>Thailand</td>
<td>2010–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TJ</td>
<td>Tajikistan</td>
<td>Tadschikistan</td>
<td>1998–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TP</td>
<td>International Technical Disclosure</td>
<td>Internationale technische Veröffentlichungen</td>
<td>1984–93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR</td>
<td>Turkey</td>
<td>Türkei</td>
<td>2000–</td>
<td>1973–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TW</td>
<td>Taiwan</td>
<td>Taiwan</td>
<td>1958, 2000–</td>
<td>2000–</td>
<td>1993–</td>
<td></td>
</tr>
<tr>
<td>UA</td>
<td>Ukraine</td>
<td>Ukraine</td>
<td>1999–2005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Country</td>
<td>Land</td>
<td>CAPLUS</td>
<td>INPADOCDB</td>
<td>INPAFAMDB</td>
<td>DWPI</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------</td>
<td>-------------------------------</td>
<td>--------</td>
<td>-----------</td>
<td>-----------</td>
<td>--------</td>
</tr>
<tr>
<td>UY</td>
<td>Uruguay</td>
<td>Uruguay</td>
<td>2007–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YU</td>
<td>Yugoslavia</td>
<td>Jugoslawien</td>
<td></td>
<td></td>
<td></td>
<td>1973–</td>
</tr>
<tr>
<td>ZM</td>
<td>Zambia</td>
<td>Sambia</td>
<td>1968–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZW</td>
<td>Zimbabwe</td>
<td>Simbabwe</td>
<td>1980–</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
67 Abbreviations

CAPLUS and DWPI have automatic search for abbreviations that are in frequent use, i.e. if the respective term is entered in its full form or if a truncated search includes this full form the abbreviation will be searched. This goes for the Basic Index and all text fields included in the Basic Index. This option can be switched on or off with SET ABBREVIATIONS ON or OFF respectively:

=> SET ABB ON
SET COMMAND COMPLETED

=> S DMA
L1  3834 DMA

=> S DIRECT MEMORY ACCESS
230415 DIRECT
489495 MEMORY
234464 ACCESS
2505 DIRECT MEMORY ACCESS
(DIRECT(W)MEMORY(W)ACCESS)
3834 DMA
L2  4778 DIRECT MEMORY ACCESS

67.1 Chemical Abstracts

To display the current list enter HELP ABB.

<table>
<thead>
<tr>
<th>Absolute</th>
<th>Chemistry</th>
<th>Dissociation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>Clinical</td>
<td>Distillation</td>
</tr>
<tr>
<td>Addition</td>
<td>Cliqually</td>
<td>Distilled</td>
</tr>
<tr>
<td>Additonal</td>
<td>Coefficiant</td>
<td>Electrocardiogram</td>
</tr>
<tr>
<td>Additionally</td>
<td>Commercial</td>
<td>Electroencephalogram</td>
</tr>
<tr>
<td>Adrenocorticotropic</td>
<td>Compound</td>
<td>Equilibrium</td>
</tr>
<tr>
<td>Alcohol</td>
<td>Concentrated</td>
<td>Equivalent</td>
</tr>
<tr>
<td>Alcoholic</td>
<td>Concentrated</td>
<td>Estimate</td>
</tr>
<tr>
<td>Aliphatic</td>
<td>Concentrated</td>
<td>Estimation</td>
</tr>
<tr>
<td>Alkali</td>
<td>Concentration</td>
<td>Ethyl</td>
</tr>
<tr>
<td>Alkaline</td>
<td>Concentration</td>
<td>Evaporate</td>
</tr>
<tr>
<td>Alkinity</td>
<td>Concentration</td>
<td>Evaporated</td>
</tr>
<tr>
<td>Amount</td>
<td>Conductivity</td>
<td>Ethylene</td>
</tr>
<tr>
<td>Analyses</td>
<td>Constant</td>
<td>Evaporating</td>
</tr>
<tr>
<td>Analysis</td>
<td>Containing</td>
<td>Examine</td>
</tr>
<tr>
<td>Analytical</td>
<td>Corrected</td>
<td>Examine</td>
</tr>
<tr>
<td>Analytically</td>
<td>Critical</td>
<td>Examination</td>
</tr>
<tr>
<td>Anhydrous</td>
<td>Crystalline</td>
<td>Extract</td>
</tr>
<tr>
<td>Apparatus</td>
<td>Crystallization</td>
<td>Extracted</td>
</tr>
<tr>
<td>Approximate</td>
<td>Crystallized</td>
<td>Extracting</td>
</tr>
<tr>
<td>Approximately</td>
<td>Crystallizing</td>
<td>Extraction</td>
</tr>
<tr>
<td>Approximation</td>
<td>Crystallizing</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Aqueous</td>
<td>Decompose</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Aromatic</td>
<td>Decomposed</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Associate</td>
<td>Decomposing</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Associated</td>
<td>Decomposition</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Associating</td>
<td>Degradation</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Association</td>
<td>Deoxyribonuclease</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Asymmetric</td>
<td>Derivative</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Asymmetrically</td>
<td>Determination</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Asymmetry</td>
<td>Determined</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Atmosphere</td>
<td>Determined</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Atmospheric</td>
<td>Diameter</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Average</td>
<td>Di lute</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Calculate</td>
<td>Di luted</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Calculated</td>
<td>Di luted</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Calculating</td>
<td>Di luting</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Calculation</td>
<td>Dimethylformamide</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Calorie</td>
<td>Dissociate</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Chemical</td>
<td>Dissociated</td>
<td>Extracellular</td>
</tr>
<tr>
<td>Chemically</td>
<td>Dissociating</td>
<td>Manufacture</td>
</tr>
</tbody>
</table>

559
67.2  Derwent World Patents Index

To display the current list enter HELP XABB and HELP YABB.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>INORGANICALLY</td>
<td></td>
</tr>
<tr>
<td>INOSINE 5 DIPHOSPHATE</td>
<td></td>
</tr>
<tr>
<td>INOSINE 5 MONOPHOSPHATE</td>
<td></td>
</tr>
<tr>
<td>INOSITOL TRIPHOSPHATE</td>
<td></td>
</tr>
<tr>
<td>INSOLUBILITY</td>
<td></td>
</tr>
<tr>
<td>INSOLUBLE</td>
<td></td>
</tr>
<tr>
<td>INSPECTORS GENERAL</td>
<td></td>
</tr>
<tr>
<td>INSTRUMENT LANDING SYSTEM</td>
<td></td>
</tr>
<tr>
<td>INSULATE GATE</td>
<td></td>
</tr>
<tr>
<td>INSULATION RESISTANCE</td>
<td></td>
</tr>
<tr>
<td>INTEGRATED CIRCUIT</td>
<td></td>
</tr>
<tr>
<td>INTEGRATED DATA ENVIRONMENT</td>
<td></td>
</tr>
<tr>
<td>INTEGRATED DRIVE</td>
<td></td>
</tr>
<tr>
<td>ELECTRONIC</td>
<td></td>
</tr>
<tr>
<td>INTEGRATED ELECTRONICS</td>
<td></td>
</tr>
<tr>
<td>CI RCUIT</td>
<td></td>
</tr>
<tr>
<td>INTEGRATED LOGISTICS SUPPORT</td>
<td></td>
</tr>
<tr>
<td>INTERMOLECULAR</td>
<td></td>
</tr>
<tr>
<td>INTERNATIONAL UNI T</td>
<td></td>
</tr>
<tr>
<td>INTERRUPT REQUEST</td>
<td></td>
</tr>
<tr>
<td>NTRAMOLECULAR</td>
<td></td>
</tr>
<tr>
<td>NTRAMUSCULAR</td>
<td></td>
</tr>
<tr>
<td>NTRAMUSCULARLY</td>
<td></td>
</tr>
<tr>
<td>NTRAPELONAL</td>
<td></td>
</tr>
<tr>
<td>NTRAPELONALLY</td>
<td></td>
</tr>
<tr>
<td>NTRANOVENOUS</td>
<td></td>
</tr>
<tr>
<td>NTRANOVENOUSLY</td>
<td></td>
</tr>
<tr>
<td>NTRADIATION</td>
<td></td>
</tr>
<tr>
<td>ISOELECTRIC</td>
<td></td>
</tr>
<tr>
<td>ISOLELECTRICALLY</td>
<td></td>
</tr>
<tr>
<td>ISOELECTRICITY</td>
<td></td>
</tr>
<tr>
<td>JOB CONTROL LANGUAGE</td>
<td></td>
</tr>
<tr>
<td>JOINT TASK FORCE</td>
<td></td>
</tr>
<tr>
<td>KILOBYTE</td>
<td></td>
</tr>
<tr>
<td>KILOHERTZ</td>
<td></td>
</tr>
<tr>
<td>KILOMETER</td>
<td></td>
</tr>
<tr>
<td>KILOWATT</td>
<td></td>
</tr>
<tr>
<td>LABORATORY</td>
<td></td>
</tr>
<tr>
<td>LETHAL DOSE</td>
<td></td>
</tr>
<tr>
<td>LIGHT EMITTING DIODE</td>
<td></td>
</tr>
<tr>
<td>LIQUID</td>
<td></td>
</tr>
<tr>
<td>LIST PROCESSING LANGUAGE</td>
<td></td>
</tr>
<tr>
<td>LOCAL AREA NETWORK</td>
<td></td>
</tr>
<tr>
<td>LOW ENERGY ELECTRON</td>
<td></td>
</tr>
<tr>
<td>DIFFRACTION</td>
<td></td>
</tr>
<tr>
<td>LUMEN</td>
<td></td>
</tr>
<tr>
<td>LUTEINIZING HORMONE</td>
<td></td>
</tr>
<tr>
<td>LUX</td>
<td></td>
</tr>
<tr>
<td>MACROMOLECULAR</td>
<td></td>
</tr>
<tr>
<td>MAGNETO OPTICAL</td>
<td></td>
</tr>
<tr>
<td>MAGNETOHYDRODYNAMIC</td>
<td></td>
</tr>
<tr>
<td>MAGNETOHYDRODYNAMICS</td>
<td></td>
</tr>
<tr>
<td>MANUFACTURE</td>
<td></td>
</tr>
<tr>
<td>MANUFACTURING</td>
<td></td>
</tr>
<tr>
<td>MATHEMATICAL</td>
<td></td>
</tr>
<tr>
<td>MATHEMATICALLY</td>
<td></td>
</tr>
<tr>
<td>MAXI Mal</td>
<td></td>
</tr>
<tr>
<td>MAXI MUM</td>
<td></td>
</tr>
<tr>
<td>MAXI MUMS</td>
<td></td>
</tr>
<tr>
<td>MAXWELL</td>
<td></td>
</tr>
<tr>
<td>MECHANICAL</td>
<td></td>
</tr>
<tr>
<td>MECHANICAL CAL</td>
<td></td>
</tr>
<tr>
<td>MECHANICAL CALLY</td>
<td></td>
</tr>
<tr>
<td>MEDIA CONTROL INTERFACE</td>
<td></td>
</tr>
<tr>
<td>MEDICAL HISTORY DATA</td>
<td></td>
</tr>
<tr>
<td>MEGABYTE</td>
<td></td>
</tr>
<tr>
<td>MELANOCYTE - STIMULATING HORMONE</td>
<td></td>
</tr>
<tr>
<td>MELTING POINT</td>
<td></td>
</tr>
<tr>
<td>MESSENGER RNA</td>
<td></td>
</tr>
<tr>
<td>METABOLISM</td>
<td></td>
</tr>
<tr>
<td>METER</td>
<td></td>
</tr>
<tr>
<td>METHEMOGLOBIN</td>
<td></td>
</tr>
<tr>
<td>METHYL</td>
<td></td>
</tr>
<tr>
<td>MI CROANALYSIS</td>
<td></td>
</tr>
<tr>
<td>MI CROWAVE LANDING SYSTEM</td>
<td></td>
</tr>
<tr>
<td>MILES PER HOUR</td>
<td></td>
</tr>
<tr>
<td>MILLISECOND</td>
<td></td>
</tr>
<tr>
<td>MI NI MUM</td>
<td></td>
</tr>
<tr>
<td>MI NI MUMS</td>
<td></td>
</tr>
<tr>
<td>MI NUTE</td>
<td></td>
</tr>
<tr>
<td>MI SCHELANGEOUS</td>
<td></td>
</tr>
<tr>
<td>MI XTURE</td>
<td></td>
</tr>
<tr>
<td>MI XTURES</td>
<td></td>
</tr>
<tr>
<td>MOLE</td>
<td></td>
</tr>
<tr>
<td>MOLECULAR</td>
<td></td>
</tr>
<tr>
<td>MOLECULAR ORBITAL</td>
<td></td>
</tr>
<tr>
<td>MOLECULE</td>
<td></td>
</tr>
<tr>
<td>MOLECULES</td>
<td></td>
</tr>
<tr>
<td>MOLECULES IN MOLECULES</td>
<td></td>
</tr>
<tr>
<td>MONOMOLECULAR</td>
<td></td>
</tr>
<tr>
<td>MOTION PICTURE EXPERTS GROUP</td>
<td></td>
</tr>
<tr>
<td>MULTIPLEXER</td>
<td></td>
</tr>
<tr>
<td>NEGATIVELY</td>
<td></td>
</tr>
<tr>
<td>NEGATIVELY</td>
<td></td>
</tr>
<tr>
<td>NI COTI NAMIDE MONONUCLEOTIDE</td>
<td></td>
</tr>
<tr>
<td>NUCLEAR MAGNETIC RESONANCE</td>
<td></td>
</tr>
<tr>
<td>NUCLEAR QUADRUPOLE RESONANCE</td>
<td></td>
</tr>
<tr>
<td>NUMBER</td>
<td></td>
</tr>
<tr>
<td>OBJECT ORIENTED PROGRAMMING</td>
<td></td>
</tr>
<tr>
<td>OBSERVED</td>
<td></td>
</tr>
<tr>
<td>OBTAINED</td>
<td></td>
</tr>
<tr>
<td>OERSTED</td>
<td></td>
</tr>
<tr>
<td>OPEN SYSTEM INTERCONNECT</td>
<td></td>
</tr>
<tr>
<td>OPEN SYSTEMS</td>
<td></td>
</tr>
<tr>
<td>INTERCONNECTION</td>
<td></td>
</tr>
<tr>
<td>OPERATING SYSTEM</td>
<td></td>
</tr>
<tr>
<td>OPTICAL CHARACTER READER</td>
<td></td>
</tr>
<tr>
<td>OPTICAL ROTATORY DI SPERSION</td>
<td></td>
</tr>
<tr>
<td>ORGANIC</td>
<td></td>
</tr>
<tr>
<td>ORGANIC CAL</td>
<td></td>
</tr>
<tr>
<td>ORGANICALLY</td>
<td></td>
</tr>
<tr>
<td>OUNCE</td>
<td></td>
</tr>
<tr>
<td>OXIDATION</td>
<td></td>
</tr>
<tr>
<td>OXIDATIONS</td>
<td></td>
</tr>
<tr>
<td>PARAMAGNETIC RESONANCE</td>
<td></td>
</tr>
<tr>
<td>PARISER PARR POPELE</td>
<td></td>
</tr>
<tr>
<td>PARTICULARLY</td>
<td></td>
</tr>
<tr>
<td>PARTS BY WEIGHT</td>
<td></td>
</tr>
<tr>
<td>PARTS PER BILLION</td>
<td></td>
</tr>
<tr>
<td>PARTS PER MILLION</td>
<td></td>
</tr>
<tr>
<td>PARTS PER THOUSAND</td>
<td></td>
</tr>
<tr>
<td>PASCAL</td>
<td></td>
</tr>
<tr>
<td>PEROXIDATION</td>
<td></td>
</tr>
<tr>
<td>PERSONAL COMPUTER</td>
<td></td>
</tr>
<tr>
<td>PERSONAL COMPUTER BOARD</td>
<td></td>
</tr>
<tr>
<td>PETROCHEMICAL</td>
<td></td>
</tr>
<tr>
<td>PHENYL</td>
<td></td>
</tr>
<tr>
<td>PHOTOCHEMICAL</td>
<td></td>
</tr>
<tr>
<td>PHOTOCHEMICAL CALL</td>
<td></td>
</tr>
<tr>
<td>PHOTOCHROME STRY</td>
<td></td>
</tr>
<tr>
<td>PHOTOCONEDUCTIVE</td>
<td></td>
</tr>
<tr>
<td>PHOTOCONEDUCTIVELY</td>
<td></td>
</tr>
<tr>
<td>PHOTODECOMPOSITION</td>
<td></td>
</tr>
<tr>
<td>PHOTODEGRADATION</td>
<td></td>
</tr>
<tr>
<td>PHOTODEGRADATION</td>
<td></td>
</tr>
<tr>
<td>PHOTOELECTRIC</td>
<td></td>
</tr>
<tr>
<td>PHOTOELECTRICAL</td>
<td></td>
</tr>
<tr>
<td>PHOTOELECTRICALLY</td>
<td></td>
</tr>
<tr>
<td>PHOTOMECHANICAL</td>
<td></td>
</tr>
<tr>
<td>PHOTOMECHANICALLY</td>
<td></td>
</tr>
<tr>
<td>PHOTOXIDATION</td>
<td></td>
</tr>
<tr>
<td>PHYSICALLY</td>
<td></td>
</tr>
<tr>
<td>PHYSICALLY</td>
<td></td>
</tr>
<tr>
<td>PHYSICALLY</td>
<td></td>
</tr>
<tr>
<td>Physis chehical</td>
<td></td>
</tr>
<tr>
<td>PII E ZOELECTRIC</td>
<td></td>
</tr>
<tr>
<td>PII E ZOELECTRICALLY</td>
<td></td>
</tr>
<tr>
<td>PII E ZOELECTRICALLY</td>
<td></td>
</tr>
<tr>
<td>PII E ZOELECTRICITY</td>
<td></td>
</tr>
<tr>
<td>POINTED</td>
<td></td>
</tr>
<tr>
<td>POINT OF SALES</td>
<td></td>
</tr>
<tr>
<td>POLY CHLORINATED BIPHENYL</td>
<td></td>
</tr>
<tr>
<td>POLYMERIZATION</td>
<td></td>
</tr>
<tr>
<td>POLYMERIZED</td>
<td></td>
</tr>
<tr>
<td>POLYVINYL CHLORIDE</td>
<td></td>
</tr>
<tr>
<td>PORTABLE DOCUMENT FORMAT</td>
<td></td>
</tr>
<tr>
<td>POSITIVE</td>
<td></td>
</tr>
<tr>
<td>POSITIVELY</td>
<td></td>
</tr>
<tr>
<td>POTENTIAL DIFFERENCE</td>
<td></td>
</tr>
<tr>
<td>POUND</td>
<td></td>
</tr>
<tr>
<td>POUNDS PER SQUARE INCH</td>
<td></td>
</tr>
<tr>
<td>POUNDS PER SQUARE INCH GAGE</td>
<td></td>
</tr>
<tr>
<td>POWDERED</td>
<td></td>
</tr>
<tr>
<td>PRECIPITATE</td>
<td></td>
</tr>
<tr>
<td>PRECIPITATED</td>
<td></td>
</tr>
<tr>
<td>PRECIPITATES</td>
<td></td>
</tr>
<tr>
<td>PRECIPITATING</td>
<td></td>
</tr>
<tr>
<td>PRECIPITATION</td>
<td></td>
</tr>
<tr>
<td>PREFERABLY</td>
<td></td>
</tr>
<tr>
<td>PREFERRED</td>
<td></td>
</tr>
<tr>
<td>PREPARATION</td>
<td></td>
</tr>
<tr>
<td>PREPARED</td>
<td></td>
</tr>
<tr>
<td>PREPARING</td>
<td></td>
</tr>
<tr>
<td>PRETTY GOOD PRIVACY</td>
<td></td>
</tr>
<tr>
<td>PRIMARY</td>
<td></td>
</tr>
<tr>
<td>PRODUCT</td>
<td></td>
</tr>
<tr>
<td>PRODUCTION</td>
<td></td>
</tr>
<tr>
<td>PRODUCTS</td>
<td></td>
</tr>
<tr>
<td>PROPERTIES</td>
<td></td>
</tr>
<tr>
<td>PROPYL</td>
<td></td>
</tr>
<tr>
<td>PuriFICATION</td>
<td></td>
</tr>
<tr>
<td>PYROELECTRIC</td>
<td></td>
</tr>
<tr>
<td>PYROELECTRIC CAL</td>
<td></td>
</tr>
<tr>
<td>PYROELECTRICITY</td>
<td></td>
</tr>
<tr>
<td>QUALITATIVE</td>
<td></td>
</tr>
<tr>
<td>QUALITATIVELY</td>
<td></td>
</tr>
<tr>
<td>QUALITY</td>
<td></td>
</tr>
<tr>
<td>QUALITY CONTROL</td>
<td></td>
</tr>
<tr>
<td>QUANTITATIVE</td>
<td></td>
</tr>
<tr>
<td>QUANTITATIVELY</td>
<td></td>
</tr>
<tr>
<td>QUARTERNY</td>
<td></td>
</tr>
<tr>
<td>RADIO DETECTION AND RANGING</td>
<td></td>
</tr>
<tr>
<td>RADIOCHEMAL</td>
<td></td>
</tr>
<tr>
<td>RADIOCHEMAL CALL</td>
<td></td>
</tr>
<tr>
<td>RADIOMEUMINOASSAY</td>
<td></td>
</tr>
<tr>
<td>RANDOM ACCESS MEMORY</td>
<td></td>
</tr>
<tr>
<td>RANDOM PHASE APPROXIMATION</td>
<td></td>
</tr>
<tr>
<td>RANGE ERROR PROBABLE</td>
<td></td>
</tr>
</tbody>
</table>
### 68 INPADOCDB/INPAFAMDB – Numbers with appended codes

#### 68.1 Patent numbers

With the INPADOCDB database now covering publications starting in 1836 it becomes more likely that serial numbers of applications and publications overlap. In order to avoid ambiguities in overlapping serial numbers the format of patent numbers was adapted to include letters and/or numbers from the patent kind code, PK (see also: “Search by formal data”).

- Utility model numbers have a **U** appended – except Germany (DEU) and China (CNU) where the current publication number format includes the information that this is a utility model number,
- For technical reasons the EPO introduced dummy patent numbers with an appended **D** where the publication number is unknown and/or was derived from the application number.

In addition to this, a code is appended to the following numbers:

<table>
<thead>
<tr>
<th>Kind Code</th>
<th>Range</th>
<th>Number format</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATT</td>
<td>from 1980</td>
<td>ATNnnnnn<strong>T</strong></td>
<td>AT374703<strong>T</strong></td>
</tr>
<tr>
<td>BAB1</td>
<td>from 1998</td>
<td>BAYYYYYYYYY<strong>B</strong></td>
<td>BA9800222<strong>B</strong></td>
</tr>
<tr>
<td>CNC</td>
<td>from 1993</td>
<td>CNZNNNNNNNC</td>
<td>CN1317092C</td>
</tr>
<tr>
<td>DDB1-5</td>
<td>1968-2004</td>
<td>DDNNnnnnn<strong>B</strong></td>
<td>DD2222737<strong>B</strong></td>
</tr>
<tr>
<td>DET1</td>
<td>from 1983</td>
<td>DENTnnnnnn<strong>T</strong></td>
<td>DE634699<strong>T</strong></td>
</tr>
<tr>
<td>DEU, DEU1</td>
<td>1934-1969</td>
<td>DEZNNNNNNNU</td>
<td>DE1430841U</td>
</tr>
<tr>
<td>FRM</td>
<td></td>
<td>FRNnnnn<strong>M</strong></td>
<td>FR803<strong>M</strong></td>
</tr>
<tr>
<td>FRF</td>
<td></td>
<td>FRNnnn<strong>F</strong></td>
<td>FR342<strong>F</strong></td>
</tr>
<tr>
<td>GBA</td>
<td>1900-1915</td>
<td>GBYYYYYYYY<strong>A</strong></td>
<td>GB1422706A</td>
</tr>
<tr>
<td>ISB</td>
<td>from 2000</td>
<td>ISnnnn<strong>B</strong></td>
<td>IS2264<strong>B</strong></td>
</tr>
<tr>
<td>ISB2</td>
<td>from 2000</td>
<td>ISnnnn<strong>B2</strong></td>
<td>IS1758<strong>B2</strong></td>
</tr>
<tr>
<td>ISB6</td>
<td>from 1923</td>
<td>ISnnnn<strong>B6</strong></td>
<td>IS1730<strong>B6</strong></td>
</tr>
<tr>
<td>JP</td>
<td>1961-1989</td>
<td>JPNnnnnnn<strong>B</strong></td>
<td>J43005888<strong>B</strong></td>
</tr>
<tr>
<td>JP</td>
<td>1999-1996</td>
<td>JPEEEEEEEEE<strong>E</strong></td>
<td>J07020436<strong>B</strong></td>
</tr>
<tr>
<td>JP</td>
<td>from 1997</td>
<td>JPNnnnnnn<strong>B</strong></td>
<td>J3903790<strong>B</strong></td>
</tr>
<tr>
<td>JP</td>
<td>1962-1989</td>
<td>JPNnnnnnn<strong>B</strong></td>
<td>J39014010<strong>B</strong></td>
</tr>
<tr>
<td>JP</td>
<td>1999-1996</td>
<td>JPEEEEEEEEE<strong>E</strong></td>
<td>J983805<strong>B</strong></td>
</tr>
<tr>
<td>JP</td>
<td>from 1996</td>
<td>JPNnnnnnn<strong>B</strong></td>
<td>J3903281<strong>B</strong></td>
</tr>
<tr>
<td>KED</td>
<td></td>
<td>KENnnnn<strong>D</strong></td>
<td>KE373<strong>D</strong></td>
</tr>
<tr>
<td>LTR3</td>
<td>from 1990</td>
<td>LTNnnnn<strong>R3</strong></td>
<td>LT2661<strong>R3</strong></td>
</tr>
<tr>
<td>MCE</td>
<td>from 1958</td>
<td>MCnnnn<strong>E</strong></td>
<td>MC219<strong>E</strong></td>
</tr>
<tr>
<td>MDE</td>
<td>from 2000</td>
<td>MDYYYYYYYYYYYY<strong>E</strong></td>
<td>MD2004000008<strong>E</strong></td>
</tr>
<tr>
<td>MDF3</td>
<td>from 2003</td>
<td>MDNnnnn<strong>F3</strong></td>
<td>MD10<strong>F3</strong></td>
</tr>
<tr>
<td>MXE</td>
<td>from 1980</td>
<td>MXnnnnn<strong>E</strong></td>
<td>MX773<strong>E</strong></td>
</tr>
<tr>
<td>OAE</td>
<td>from 1966</td>
<td>OANnnnn<strong>E</strong></td>
<td>OA156<strong>E</strong></td>
</tr>
<tr>
<td>PLB1</td>
<td>from 1973</td>
<td>PLNnnnnnn<strong>B1</strong></td>
<td>PL194696<strong>B1</strong></td>
</tr>
<tr>
<td>SEE</td>
<td>from 1900</td>
<td>SEnnnnnnn<strong>E</strong></td>
<td>SE519853<strong>E</strong></td>
</tr>
<tr>
<td>USE</td>
<td>from 1836</td>
<td>USnnnnnn<strong>E</strong></td>
<td>US20854<strong>E</strong></td>
</tr>
<tr>
<td>USE1</td>
<td></td>
<td>USnnnnnn<strong>E</strong></td>
<td>US39903<strong>E</strong></td>
</tr>
<tr>
<td>USF1, USF2</td>
<td></td>
<td>USnnnnnn<strong>E</strong></td>
<td>US35860<strong>E</strong></td>
</tr>
<tr>
<td>USH, USH1</td>
<td>from 1985</td>
<td>USnnnnnnnn<strong>H</strong></td>
<td>US7<strong>H</strong></td>
</tr>
<tr>
<td>USI3</td>
<td>1838-1869</td>
<td>USnnnnnn<strong>A1</strong></td>
<td>US120A<strong>I</strong></td>
</tr>
<tr>
<td>USI4</td>
<td></td>
<td>USnnnnnnn<strong>T</strong></td>
<td>US101004<strong>T</strong></td>
</tr>
<tr>
<td>USI5</td>
<td></td>
<td>USnnnnnnn<strong>I5</strong></td>
<td>US5738215<strong>I5</strong></td>
</tr>
<tr>
<td>USP1</td>
<td>from 2001</td>
<td>USYYYYYYYYYYYY<strong>E</strong></td>
<td>US20070250971<strong>P</strong></td>
</tr>
<tr>
<td>USP2, USP3</td>
<td>from 2001</td>
<td>USnnnnnn<strong>P</strong></td>
<td>US18172<strong>P</strong></td>
</tr>
<tr>
<td>USS</td>
<td></td>
<td>USnnnnnn<strong>D</strong></td>
<td>US53336<strong>D</strong></td>
</tr>
</tbody>
</table>
Surveys

<table>
<thead>
<tr>
<th>Kind Code</th>
<th>Range</th>
<th>Number format</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>USS1</td>
<td>USNnnnnnnD</td>
<td>US444254D</td>
<td></td>
</tr>
<tr>
<td>ZAD</td>
<td>to 2000</td>
<td>ZAYNNNNND</td>
<td>ZA7207106D</td>
</tr>
<tr>
<td></td>
<td>from 2000</td>
<td>ZAYYYYYYYYYE</td>
<td>ZA200302123D</td>
</tr>
</tbody>
</table>

N digit, mandatory
n digit, optional
EEE e.g. 3 digit number, zero-filled
YYYY calendar year, may be two-digit before 2000

68.2 Application numbers

Overlapping numbers exist in the case of application numbers, too, and make it necessary to append a code for the type of application and/or priority to the number.

- Utility model application numbers have a U appended – except Germany (DEU) and China (CNU) where the current application number format includes the information that this is a utility model application,
- For technical reasons (see above), there may be a need to create dummy application or priority numbers. These have one of the following letters appended:
  - D – application numbers,
  - T – priority application numbers,
  - X – application or priority numbers before 1920.

Additional codes:

<table>
<thead>
<tr>
<th>Kind Code</th>
<th>Range</th>
<th>Number format</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUP</td>
<td>seit 1990</td>
<td>HUYYYY-NnnnnP</td>
<td>HU2002-3929P</td>
</tr>
<tr>
<td>MDP</td>
<td>seit 2000</td>
<td>MDYYYY-NnnnnP</td>
<td>MD2004-3P</td>
</tr>
</tbody>
</table>
69 Asian Publications

Asian publications can be found in the three big patent databases with international coverage:

- CAPLUS by Chemical Abstracts Service (CAS),
- INPAFAMDB by the European Patent Office and FIZ Karlsruhe and
- Derwent World Patents Index by Thomson Reuters.

This is complemented by two national patent databases:

- JAPIO by the Japanese Patent Office and
- KOREAPAT by the Korean Institute of Patent Information (KIPI).

For full-text searches, there are 3 databases for Asian countries:

- JPFULL, from 1964 (is completed backwards bit by bit)
- CNFULL, from 1985
- INFULL

69.1 CAPLUS

- China
  - From 1985
  - Unexamined and examined patent applications and granted utility models
  - Current unexamined applications and granted utility models with new number format
  - Granted utility models from publication year 2006
  - Granted patents from 2004
  - Good timeliness for all Chinese publications
  - Bibliographical details and translation of the original abstract within 2 weeks
  - Full indexing information is entered within 50 days

- India
  - From 1946
  - Unexamined and examined applications, patents
  - Indian patent applications (new law) from 2004
  - Bibliographical details and abstracts are available 2 weeks after publication

- Japan
  - From 1916
  - Unexamined and examined applications, patents, Japanese translations of PCT applications
  - Utility models from publication year 2006
  - Bibliographical details and abstracts are available 2 days after publication
  - Full indexing is entered within 27 days
  - Japanese patent classification (FTERMS), thesaurus of F-TERMS
Surveys

- Korea
  - From 1994
  - Unexamined and examined applications, patents
  - Utility models from publication year 2006
  - Bibliographical details and abstracts are available 2 weeks after publication

- Philippines
  - From 2001
  - Unexamined applications

- Singapore, Taiwan and Hong Kong (from 2000)

69.2 INPAFAMDB

- China
  - Unexamined and examined patent applications, patents, utility model applications and granted utility models
  - Current patent applications, patents and granted utility models with new number format
  - Documents are entered approx. 1-3 months after publication
  - Legal status data from 1985 and entry into national phase of PCT applications
  - English abstracts (human-translated by SIPO) are available for patents and utility models, partly original abstracts
  - Names may appear uncommon (through transliteration), often the standardized name fields INS and PAS can help—mainly relevant for national applications without other family members

- Japan
  - Unexamined and examined applications, patents, Japanese translations of PCT applications of non-Japanese applicants, utility model applications and granted utility models
  - Documents entered from 1944
  - Documents are entered 1-3 months after publication
  - No legal status data, only entry and non-entry into the national phase of PCT applications
  - No abstracts
  - When documents are entered the English title and inventor and applicant names may be missing, the details are added later—mainly relevant for national applications without other family members
  - Names may appear uncommon (through transliteration), often the standardized name fields INS and PAS can help—mainly relevant for national applications without other family members

- Korea
  - Examined and unexamined patent applications from 1978, granted patents from 1984, examined utility model applications and examined utility models from 1978 to 2000
  - Documents are entered 1-3 months after publication
  - No legal status data, only entry and non-entry into the national phase of PCT applications
  - English abstracts
  - Names may appear uncommon (through transliteration), often the standardized name fields INS and PAS can help—mainly relevant for national applications without other family members
Guide to STN Patent Databases

- Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, Taiwan, Vietnam
  - Documents are often entered with extreme delay
  - No current documents from IN, MY and VN
  - Utility models from TW from 2000
  - Patents from PH from 1975 to 1979 (incomplete)
  - Utility models from PH from 1982 to 1995
  - No legal status data
  - English abstracts are only partly available from TW and SG
  - Hong Kong: legal status data from 4/2009

69.3 DWPI

- China
  - From 1985
  - Unexamined patent applications, patents, granted utility models
  - Current unexamined applications and granted utility models with new number format
  - Chinese utility models are entered from June 2007
  - Chemical indexing for patent applications and utility models from January 2008
  - English translations (by humans) of application title and abstract from July 2007
  - English translations (by human) of all claims (from 7/2008) can be displayed in Member level – for Chinese patents (from 1/2007) and utility models (from 6/2007) in the DWPI patent family

- India
  - Unexamined and examined applications, patents
  - Indian patent applications (new law) from 2004
  - Indian examined applications from 2000
  - Bibliographical details and abstracts available 2 weeks after publication

- Japan
  - From 1963
  - Examined applications for chemical patents (CPI) from 1963, all technologies from 1999
  - Unexamined applications in electrical engineering (EPI) from 1982, all technologies from 1996
  - Granted patents from 1996
  - Utility model from publication year 2008
  - Main claims in English from 2006
  - Japanese patent classification (FI-Terms, File Index Codes) and FTERMS (File forming Term) from 1966
  - F-TERM thesaurus for easy identification of relevant F-Terms and search and display of the F-Term hierarchy

- Korea
  - From 1986
  - Unexamined applications, patents
  - Delay: 30 days
  - English machine translations of application title and abstract from January 2008
Surveys

- Korean utility models from January 2008
- English machine translations of all patent claims from January 2008, searchable in publication level

- Singapore: from 1995
- Taiwan
  - Patent applications from 1993
  - Patents
  - Utility models from 2003 in the DWPI family, including English titles from 2008
- Philippines:
  - Patent applications and patents
  - Utility models from January 2010
- Thailand: Patents from January 2010
- Vietnam: Patent applications and patents from January 2010
- Malaysia: Patents from January 2010
- Hong Kong: Patent applications, patents and short-term patents from January 2011

69.4 Summary: Chinese Patent Documents

<table>
<thead>
<tr>
<th>CN-A</th>
<th>CAPLUS</th>
<th>INPAFAMDB</th>
<th>DWPI*</th>
<th>CNFULL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CN-B/C</td>
<td>BIB 2004-1985-1985</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>examined patent applications/patents</td>
<td>1985-1985</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>utility model applications/</td>
<td>1985-1985-1985</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
* – Chemical indexing for CNA and CNY from 2008, English translations (by human) of all claims in publication level for invention patents (from 1/2007) and utility models (from 6/2007)
** – English abstracts (human-translated by SIPO) from 1985

69.4.1 CNFULL

CNFULL contains full texts (machine-translated) from 1985, the titles and abstracts are replaced with human-translated texts after approximately 3 months.

69.4.2 Conclusion

Very extensive and current coverage in the value-added databases and in INPAFAMDB:

- Bibliographical details and abstracts available for patents from 1985
- Utility models are available in the value-added databases from 2006/7
- INPAFAMDB has bibliographical details and abstracts of utility models from 1985
- Translated claims are available in DWPI in publication level from 1/2007
- Good timeliness in CAPlus (translated abstracts and full indexing)
- Full-text database CNFULL
## 69.5 Summary: Indian Patent Documents

<table>
<thead>
<tr>
<th></th>
<th>CAPPLUS**</th>
<th>INPAFAMDB***</th>
<th>DWPI***</th>
<th>INFULL**</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN</td>
<td>BIB</td>
<td>1948-1974</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Abstracts</td>
<td>1948-1974</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Images</td>
<td>Chem. Draw.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN-A unexamined patent applications</td>
<td>BIB</td>
<td>2004-</td>
<td>2005-</td>
<td>1995-</td>
</tr>
<tr>
<td></td>
<td>Abstracts</td>
<td>2004-</td>
<td>2005-</td>
<td>1995-</td>
</tr>
<tr>
<td></td>
<td>Images</td>
<td>Chem. Draw.</td>
<td></td>
<td>1995-</td>
</tr>
<tr>
<td>IN-A1/B examined patent applications / granted patents</td>
<td>BIB</td>
<td>1975</td>
<td>1938-2004</td>
<td>2000-</td>
</tr>
<tr>
<td></td>
<td>Abstracts</td>
<td>1975-</td>
<td>partly</td>
<td>2000-</td>
</tr>
<tr>
<td></td>
<td>Images</td>
<td>Chem. Draw.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN-I1/I2/I3/I4 unexamined patent applications</td>
<td>BIB</td>
<td>*</td>
<td>-</td>
<td>2005-</td>
</tr>
<tr>
<td></td>
<td>Abstracts</td>
<td>*</td>
<td>-</td>
<td>2005-</td>
</tr>
<tr>
<td></td>
<td>Images</td>
<td>*</td>
<td>-</td>
<td>2005-</td>
</tr>
<tr>
<td>IN-P1/P2/P3/P4 PCT applications, national phase</td>
<td>BIB</td>
<td>*</td>
<td>-</td>
<td>2005-</td>
</tr>
<tr>
<td></td>
<td>Abstracts</td>
<td>*</td>
<td>-</td>
<td>2005-</td>
</tr>
<tr>
<td></td>
<td>Images</td>
<td>*</td>
<td>-</td>
<td>2005-</td>
</tr>
</tbody>
</table>

Notes:

* – With the new patent act (from 2004) the new codes IN-I1/I2/I3/I4 for unexamined patent applications and IN-P1/P2/P3/P4 for PCT applications, national phase, were introduced. 1/2/3/4 stand for the patent offices Delhi, Kolkata (formerly Calcutta), Mumbai (formerly Bombay), Chennai (formerly Madras).

** – In CAPPLUS and INFULL patent applications and granted patents in accordance with the new patent act are available, too, but have the codes INA and INA1.

*** – INPAFAMDB includes Indian patents from 1938, but no patent applications. Current patent publications in accordance with the new patent act are not available.

**** – In DWPI the codes IN1-I4 and INP1-P4 are searchable ($\text{INP1/PK}$). However, for display the publication kind code INA (for patent applications) is used.

### 69.5.1 INFULL

INFULL contains full texts from 1912. This database also includes current documents in accordance with the new patent act from 2004. Thus, INFULL is the only database that includes all available documents from India. The abstracts are taken from the original documents or from equivalents. If the description or claims from the original publications are not sufficient for high-quality OCR they are taken from equivalents. In these cases the Field Availability (FA) field contains DETD.EQ and CLM.EQ, respectively.

### 69.5.2 Conclusion

- The INFULL full-text database has the most comprehensive coverage of Indian patent publications from 1912 and with very good timeliness.
- Current documents from India are available from CAPPLUS, DWPI and INFULL.
- Older documents before 2004 (old patent act) are available from CAPPLUS, INFULL, INPAFAMDB and partly DWPI.
- Human indexing in chemistry in CAplus from 1948 and in DWPI from 2000.
- Value-added data for all fields of technology from 2000.
### 69.6 Summary: Japanese Patent Documents

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>unexamined patent applications</td>
<td>examined patent applications/patents</td>
<td>examined and unexamined utility models</td>
</tr>
<tr>
<td><strong>CAPLUS</strong></td>
<td><strong>INPAFAMDB</strong></td>
<td><strong>DWPI</strong></td>
</tr>
<tr>
<td>BIB</td>
<td>1916-</td>
<td>1973-</td>
</tr>
<tr>
<td>Abstracts</td>
<td>1916-</td>
<td>-</td>
</tr>
<tr>
<td>Images</td>
<td>Chem. Draw.</td>
<td>-</td>
</tr>
<tr>
<td>BIB</td>
<td>2006-</td>
<td>1964-2001</td>
</tr>
<tr>
<td>Abstracts</td>
<td>2006-</td>
<td>-</td>
</tr>
<tr>
<td>Images</td>
<td>Chem. Draw.</td>
<td>-</td>
</tr>
</tbody>
</table>

**Notes:**

* In JAPIO and INPAFAMDB abstracts of national JP applications only are available from 1976, abstracts of foreign applications in Japan exist from 1998.

** The data for DWPI are valid for chemical patents (CPI). Electronic JP-A are covered from 1982, all technologies from 1996; JP-B in all technologies are covered from 1999

### 69.6.1 JAPIO

JAPIO covers unexamined JP patent applications (Kokai Tokkyo Koho) with their bibliographical details, a figure and a machine-translated title and abstract from 1976. New documents were entered into JAPIO approx. 3-4 months after publication. JAPIO has been closed, last update March 2013.

### 69.6.2 JPFULL

JPFULL contains full texts (machine-translated) from 1964, the titles and abstracts of unexamined patent applications (JPA) are replaced with human-translated texts after approximately 3 months.

### 69.6.3 Conclusion

Japan was early considered a relevant market by the database producers:

- Intellectual indexing in chemistry from 1963 in DWPI, from 1916 in CAplus
- Value-added data created for all fields of technology since 1996
- Utility models from 2006/8 with English titles and abstracts
- Machine translation of main claims in DWPI from 2006
- Japanese patent classes in CAplus (F-Terms from 2004) and DWPI (from 1966, FI & F-Terms)
- Good timeliness in CAplus (translated abstracts and full indexing)
- Full-text database JPFULL
Guide to STN Patent Databases

69.7 Summary: Korean Patent Documents

<table>
<thead>
<tr>
<th></th>
<th>CAPPLUS</th>
<th>INPAFAMDB</th>
<th>DWPI**</th>
<th>KOREAPAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>applications</td>
<td></td>
<td>2000-</td>
<td>2000-</td>
<td>2000-</td>
</tr>
<tr>
<td></td>
<td>Abstracts</td>
<td>2000-</td>
<td>1979-1983</td>
<td>2001-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2001-</td>
<td>2000-</td>
</tr>
<tr>
<td></td>
<td>Images</td>
<td>Chem. Draw.</td>
<td>-</td>
<td>2001-</td>
</tr>
<tr>
<td>KR-B/B1 examined</td>
<td>BiB</td>
<td>2007-</td>
<td>1984-</td>
<td>1986-</td>
</tr>
<tr>
<td>patent applications/</td>
<td></td>
<td></td>
<td>1986-</td>
<td>1979-*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2001-</td>
<td>1979-*</td>
</tr>
<tr>
<td></td>
<td>Images</td>
<td>Chem. Draw.</td>
<td>-</td>
<td>1986**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1979-</td>
<td>1979-*</td>
</tr>
<tr>
<td>KR-U/Y1/Y2 utility</td>
<td>BiB</td>
<td>2006-</td>
<td>1978-2000</td>
<td>2008-</td>
</tr>
<tr>
<td>model applications/</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>utility models</td>
<td>Abstracts</td>
<td>2006-</td>
<td>-</td>
<td>2008**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Images</td>
<td>Chem. Draw.</td>
<td>-</td>
<td>2008**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
* – From 2000 KR-B documents are only entered if no KR-A document is available.
** – In WPI, abstracts are only available in the CPI (chemistry) and EPI (electrical engineering) file segments

69.7.1 KOREAPAT

KOREAPAT covers unexamined KR patent applications and examined patents with their bibliographical details, a figure and an English title and abstract since 1979. The titles and abstracts are high quality, being translated by specialists. New documents are entered with a delay of approx. 3 months.

69.7.2 Conclusion

Very current and extensive coverage in the value-added databases:

- Bibliographical details and abstracts from 1979
- Abstracts for chemical and electrical patents from 1986
- Utility models with titles and abstracts from 2006/8
- Machine translation of all claims in DWPI (from 2008)
- Good timeliness in CAplus (translated abstracts and full indexing)
- Many abstracts added to INPADOCDB/INPAFAMDB
## Italy: Province codes in application numbers

(From 1991)

<table>
<thead>
<tr>
<th>UPICA</th>
<th>Code</th>
<th>Number</th>
<th>UPICA</th>
<th>Code</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrigento</td>
<td>AG</td>
<td>1</td>
<td>Messina</td>
<td>ME</td>
<td>49</td>
</tr>
<tr>
<td>Alessandria</td>
<td>AL</td>
<td>2</td>
<td>Milano</td>
<td>MI</td>
<td>50</td>
</tr>
<tr>
<td>Ancona</td>
<td>AN</td>
<td>3</td>
<td>Modena</td>
<td>MO</td>
<td>51</td>
</tr>
<tr>
<td>Aosta</td>
<td>AO</td>
<td>4</td>
<td>Napoli</td>
<td>NA</td>
<td>52</td>
</tr>
<tr>
<td>Arezzo</td>
<td>AR</td>
<td>5</td>
<td>Novara</td>
<td>NO</td>
<td>53</td>
</tr>
<tr>
<td>Ascoli Piceno</td>
<td>AP</td>
<td>6</td>
<td>Nuoro</td>
<td>NU</td>
<td>54</td>
</tr>
<tr>
<td>Asti</td>
<td>AT</td>
<td>7</td>
<td>Oristano</td>
<td>OR</td>
<td>55</td>
</tr>
<tr>
<td>Avellino</td>
<td>AV</td>
<td>8</td>
<td>Padova</td>
<td>PD</td>
<td>56</td>
</tr>
<tr>
<td>Bari</td>
<td>BA</td>
<td>9</td>
<td>Palermo</td>
<td>PA</td>
<td>57</td>
</tr>
<tr>
<td>Belluno</td>
<td>BL</td>
<td>10</td>
<td>Parma</td>
<td>PR</td>
<td>58</td>
</tr>
<tr>
<td>Benevento</td>
<td>BN</td>
<td>11</td>
<td>Pavia</td>
<td>PV</td>
<td>59</td>
</tr>
<tr>
<td>Bergamo</td>
<td>BG</td>
<td>12</td>
<td>Perugia</td>
<td>PG</td>
<td>60</td>
</tr>
<tr>
<td>Biella</td>
<td>BI</td>
<td>991</td>
<td>Pesaro</td>
<td>PS</td>
<td>61</td>
</tr>
<tr>
<td>Bologna</td>
<td>BO</td>
<td>13</td>
<td>Pescara</td>
<td>PE</td>
<td>62</td>
</tr>
<tr>
<td>Bolzano</td>
<td>BZ</td>
<td>14</td>
<td>Piacenza</td>
<td>PC</td>
<td>63</td>
</tr>
<tr>
<td>Brescia</td>
<td>BS</td>
<td>15</td>
<td>Pisa</td>
<td>PI</td>
<td>64</td>
</tr>
<tr>
<td>Brindisi</td>
<td>BR</td>
<td>16</td>
<td>Pistoia</td>
<td>PT</td>
<td>65</td>
</tr>
<tr>
<td>Cagliari</td>
<td>CA</td>
<td>17</td>
<td>Pordenone</td>
<td>PN</td>
<td>66</td>
</tr>
<tr>
<td>Caltanissetta</td>
<td>CL</td>
<td>18</td>
<td>Prato</td>
<td>PO</td>
<td>995</td>
</tr>
<tr>
<td>Campobasso</td>
<td>CB</td>
<td>19</td>
<td>Ragusa</td>
<td>RG</td>
<td>68</td>
</tr>
<tr>
<td>Caserta</td>
<td>CE</td>
<td>20</td>
<td>Ravenna</td>
<td>RA</td>
<td>69</td>
</tr>
<tr>
<td>Catania</td>
<td>CT</td>
<td>21</td>
<td>Reggio Calabria</td>
<td>RC</td>
<td>70</td>
</tr>
<tr>
<td>Catanzaro</td>
<td>CZ</td>
<td>22</td>
<td>Reggio Emilia</td>
<td>RE</td>
<td>71</td>
</tr>
<tr>
<td>Chieti</td>
<td>CH</td>
<td>23</td>
<td>Rieti</td>
<td>RI</td>
<td>72</td>
</tr>
<tr>
<td>Como</td>
<td>CO</td>
<td>24</td>
<td>Rimini</td>
<td>RN</td>
<td>996</td>
</tr>
<tr>
<td>Cosenza</td>
<td>CS</td>
<td>25</td>
<td>Roma</td>
<td>RM</td>
<td>73</td>
</tr>
<tr>
<td>Cremona</td>
<td>CR</td>
<td>26</td>
<td>Rovigo</td>
<td>RO</td>
<td>74</td>
</tr>
<tr>
<td>Crotone</td>
<td>KR</td>
<td>992</td>
<td>Salerno</td>
<td>SA</td>
<td>75</td>
</tr>
<tr>
<td>Cuneo</td>
<td>CN</td>
<td>27</td>
<td>Sassari</td>
<td>SS</td>
<td>76</td>
</tr>
<tr>
<td>Enna</td>
<td>EN</td>
<td>28</td>
<td>Savona</td>
<td>SV</td>
<td>77</td>
</tr>
<tr>
<td>Ferrara</td>
<td>FE</td>
<td>29</td>
<td>Siena</td>
<td>SI</td>
<td>78</td>
</tr>
<tr>
<td>Firenze</td>
<td>FI</td>
<td>30</td>
<td>Siracusa</td>
<td>SR</td>
<td>79</td>
</tr>
<tr>
<td>Foggia</td>
<td>FG</td>
<td>31</td>
<td>Soncino</td>
<td>SO</td>
<td>80</td>
</tr>
<tr>
<td>Forli</td>
<td>FO</td>
<td>32</td>
<td>Taranto</td>
<td>TA</td>
<td>81</td>
</tr>
<tr>
<td>Frosinone</td>
<td>FR</td>
<td>33</td>
<td>Teramo</td>
<td>TE</td>
<td>82</td>
</tr>
<tr>
<td>Genova</td>
<td>GE</td>
<td>34</td>
<td>Temi</td>
<td>TR</td>
<td>83</td>
</tr>
<tr>
<td>Gorizia</td>
<td>GO</td>
<td>35</td>
<td>Torino</td>
<td>TO</td>
<td>84</td>
</tr>
<tr>
<td>Grosseto</td>
<td>GR</td>
<td>36</td>
<td>Trapani</td>
<td>TP</td>
<td>85</td>
</tr>
<tr>
<td>Imperia</td>
<td>IM</td>
<td>37</td>
<td>Trento</td>
<td>TN</td>
<td>86</td>
</tr>
<tr>
<td>Isernia</td>
<td>IS</td>
<td>38</td>
<td>Treviso</td>
<td>TV</td>
<td>87</td>
</tr>
<tr>
<td>L'Aquila</td>
<td>AQ</td>
<td>39</td>
<td>Trieste</td>
<td>TS</td>
<td>88</td>
</tr>
<tr>
<td>La Spezia</td>
<td>SP</td>
<td>40</td>
<td>Udine</td>
<td>UD</td>
<td>89</td>
</tr>
<tr>
<td>Latina</td>
<td>LT</td>
<td>41</td>
<td>Varese</td>
<td>VA</td>
<td>90</td>
</tr>
<tr>
<td>Lecco</td>
<td>LE</td>
<td>42</td>
<td>Venezia</td>
<td>VE</td>
<td>91</td>
</tr>
<tr>
<td>Livorno</td>
<td>LI</td>
<td>43</td>
<td>Verbano</td>
<td>VB</td>
<td>997</td>
</tr>
<tr>
<td>Lodi</td>
<td>LO</td>
<td>994</td>
<td>Vercelli</td>
<td>VC</td>
<td>92</td>
</tr>
<tr>
<td>Lucca</td>
<td>LU</td>
<td>44</td>
<td>Verona</td>
<td>VR</td>
<td>93</td>
</tr>
<tr>
<td>Macerata</td>
<td>MC</td>
<td>45</td>
<td>Vibo Valentia</td>
<td>VV</td>
<td>998</td>
</tr>
<tr>
<td>Mantova</td>
<td>MN</td>
<td>46</td>
<td>Vicenza</td>
<td>VI</td>
<td>94</td>
</tr>
<tr>
<td>Massa Carrara</td>
<td>MS</td>
<td>47</td>
<td>Viterbo</td>
<td>VT</td>
<td>95</td>
</tr>
<tr>
<td>Matera</td>
<td>MT</td>
<td>48</td>
<td>UIBM Dep.Post.</td>
<td>DP</td>
<td>96</td>
</tr>
</tbody>
</table>

Source: INPADOCDB, Handbook 2008
Old format:

<table>
<thead>
<tr>
<th>Code</th>
<th>Country</th>
<th>Publication Date</th>
<th>Application Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIT</td>
<td>IT</td>
<td>19980608</td>
<td>A 19980310</td>
</tr>
<tr>
<td>PI</td>
<td>IT</td>
<td>19980608</td>
<td>A 19980310</td>
</tr>
<tr>
<td>AI</td>
<td>IT</td>
<td>VC6</td>
<td>A 19980310</td>
</tr>
<tr>
<td>PRAI</td>
<td>IT</td>
<td>VC6</td>
<td>A 19980310</td>
</tr>
</tbody>
</table>

Format before 2000:

<table>
<thead>
<tr>
<th>Code</th>
<th>Country</th>
<th>Publication Date</th>
<th>Application Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIT</td>
<td>IT</td>
<td>VC0006</td>
<td>A 19980310</td>
</tr>
<tr>
<td>PI</td>
<td>IT</td>
<td>VC0006</td>
<td>A 19980310</td>
</tr>
<tr>
<td>AI</td>
<td>IT</td>
<td>VC6</td>
<td>A 19980310</td>
</tr>
<tr>
<td>PRAI</td>
<td>IT</td>
<td>VC6</td>
<td>A 19980310</td>
</tr>
</tbody>
</table>

Format from 2000:

<table>
<thead>
<tr>
<th>Code</th>
<th>Country</th>
<th>Publication Date</th>
<th>Application Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI</td>
<td>IT</td>
<td>VC0006</td>
<td>A 20000608</td>
</tr>
</tbody>
</table>
## Number formats (Publication numbers, from 1968)

<table>
<thead>
<tr>
<th>Type of publication</th>
<th>Printed publication</th>
<th>SEARCH (STN format)</th>
<th>DISPLAY (STN format)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CN China*</td>
<td>CN 88 1 01978 A</td>
<td>S CN88101978/PN</td>
<td>CN 88101978 A</td>
<td>INPADOCDB, DWPI, CA Z=1 → Patents</td>
</tr>
<tr>
<td>Unexamined patent application (before 1989)</td>
<td>CN 1682701 A</td>
<td>S CN1682701/PN</td>
<td>CN 1682701 A</td>
<td>INPADOCDB, DWPI, CA Z=1 → Patents</td>
</tr>
<tr>
<td>Unexamined patent application (A) (1989 to 17 July, 2007)</td>
<td>CN 101057321</td>
<td>S CN101057321/PN</td>
<td>CN 101057321 A</td>
<td>INPADOCDB, CA Z=1 → Patents</td>
</tr>
<tr>
<td>Unexamined patent application (A) (from 18 July, 2007)</td>
<td>CN 1228387C</td>
<td>S CN1228387C/PN</td>
<td>CN 1228387C C</td>
<td>INPADOCDB, DWPI Z=1 → Patents</td>
</tr>
<tr>
<td>Examined patent application (to 1993)</td>
<td>CN 1228387C</td>
<td>S CN1228387C/PN</td>
<td>CN 1228387C C</td>
<td>INPADOCDB, DWPI Z=1 → Patents</td>
</tr>
<tr>
<td>Granted Patent (from 1993 to 28 Aug, 2007)</td>
<td>CN100344068C</td>
<td>S CN100344068C/PN</td>
<td>CN 100344068C C</td>
<td>INPADOCDB, DWPI Z=1 → Patents</td>
</tr>
<tr>
<td>Granted Patent (28 Sept., 2007 to 06 April, 2010)</td>
<td>CN 101446232A</td>
<td>S CN101446232/PN</td>
<td>CN 101446232 B</td>
<td>INPADOCDB, DWPI (no docs in CA yet) Z=1 → Patents</td>
</tr>
<tr>
<td>Utility model application (before 1989)</td>
<td>CN 88 2 19731 U</td>
<td>S CN88219731U/PN</td>
<td>CN 88219731U U</td>
<td>INPADOCDB Z=2 → Utility model</td>
</tr>
<tr>
<td>Utility model, granted (29 Aug., 2007 to 06 April, 2010)</td>
<td>CN 200953718Y</td>
<td>S CN200953718Y/PN</td>
<td>CN 200953718 Y</td>
<td>INPADOCDB, WPINDEX, CA Z=2 → Utility model</td>
</tr>
<tr>
<td>Erteiltes Gebrauchsmuster (from 07 April, 2010)</td>
<td>CN 201690727 U</td>
<td>S CN201690727/PN</td>
<td>CN 201690727 C</td>
<td>INPADOCDB, WPINDEX, CA Z=2 → Utility model</td>
</tr>
</tbody>
</table>

### DE Germany

<p>| Applications and patents (up to 1994); DE number for European patents (up to 1988) | DE 44 44 400 A1 | S DE4444400/PN | DE 4444400 A1 | All databases with DE publications YY → application year minus 50 |
| Utility models (up to 1994) | G 9415494.5 (Register number) | S DE9415494/PN | DE 9415494 U1 | All databases with DE publications |</p>
<table>
<thead>
<tr>
<th>Type of publication</th>
<th>Printed publication</th>
<th>SEARCH</th>
<th>DISPLAY (STN format)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications, Patents, Utility models (from 1995): DE number for European patents (from 1989) – up to application date 31 Dec, 2003</td>
<td>DE 100 00 004 A1 DE 199 28 770 C2 DE 299 00 008 U1 * DE 696 00 076 T2</td>
<td>S DE10000004/PN S DE19928770/PN S DE29900008/PN S DE69600076/PN</td>
<td>DE 10000004 A1 DE 19928770 C2 DE 29900008 U1 DE 69600076 E1</td>
<td>All databases with DE publications Z=1 → Patents Z=2 → Utility models Z=3 → Trademarks Z=5 → EP patents with DE designation in German Z=6 → EP patents with DE designation in English or French YY → Application year</td>
</tr>
</tbody>
</table>

**EP European Patent Office**


**JP Japan**


<table>
<thead>
<tr>
<th>Type of publication</th>
<th>Printed publication</th>
<th>SEARCH</th>
<th>DISPLAY (STN format)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Utility model application (U) (to 1999)</strong></td>
<td>S JPO2089350U/PN S JPEENNNNNU/PN</td>
<td>JP 02089350U</td>
<td>JP EENNNNNU U</td>
<td>INPADOCDB EE - Emperor year</td>
</tr>
<tr>
<td><strong>Examined utility model without previous U publication (Y1) (to March 1996)</strong></td>
<td>S JPO49022332Y/PN S JPEENNNNNY/PN</td>
<td>JP 49022332Y Y1</td>
<td>JP EENNNNNY Y1</td>
<td>INPADOCDB EE - Emperor year</td>
</tr>
<tr>
<td><strong>Examined utility model with previous U publication (Y2) (to March 1996)</strong></td>
<td>S JPO1007601Y/PN S JPEENNNNNY/PN</td>
<td>JP 01007601Y Y2</td>
<td>JP EENNNNNY Y2</td>
<td>INPADOCDB EE - Emperor year</td>
</tr>
<tr>
<td><strong>Registered utility model (U) (from 1994)</strong></td>
<td>3144786 (U3144786)</td>
<td>S JP3144786U/PN</td>
<td>JP 3144786U U</td>
<td>INPADOCDB (&gt;3000000)</td>
</tr>
<tr>
<td><strong>National number for PCT application (from 2000)</strong></td>
<td>S JPO2003526389/PN S JPYYYYNNNNNN/PN</td>
<td>JP 2003526389 A</td>
<td>JP YYYYNNNNN A</td>
<td>INPADOCDB</td>
</tr>
<tr>
<td><strong>National number for PCT application (T) (from 2000)</strong></td>
<td>S JPO2003526389/PN S JPYYYYNNNNNN/PN</td>
<td>JP 2003526389 T</td>
<td>JP YYYYNNNNN T</td>
<td>CA, DWPI</td>
</tr>
<tr>
<td><strong>Non-official translation of A, B, U, Y document</strong></td>
<td>D1436012</td>
<td>S JP1436012D/PN S JPNNNNNNND/pn</td>
<td>JP 1436012D S</td>
<td>JP NNNNNNND S</td>
</tr>
</tbody>
</table>

**Design publication**

<table>
<thead>
<tr>
<th>Type of publication</th>
<th>Printed publication</th>
<th>SEARCH</th>
<th>DISPLAY (STN format)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of publication</td>
<td>Printed publication</td>
<td>SEARCH</td>
<td>DISPLAY (STN format)</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>----------------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Utility model application</td>
<td>S KR97054239U/PN&lt;br&gt;S KRYYNNNNNU/PN</td>
<td>KR 97054239 U&lt;br&gt;KR YYNNNNNU</td>
<td>INPADOCDB</td>
<td></td>
</tr>
<tr>
<td>Utility model, examined, 1st publication</td>
<td>S KR9400004U/PN&lt;br&gt;S KRYYNNNNNU/PN&lt;br&gt;S KR44723U/PN&lt;br&gt;S KRNNNNNU/PN</td>
<td>KR 9400004U Y1&lt;br&gt;KR YYNNNNNU Y1&lt;br&gt;KR 444723 U Y1&lt;br&gt;KR NNNNNNU Y1</td>
<td>INPADOCDB, DWPI, HCAPPLUS&lt;br&gt;(various formats, partly no appended U)</td>
<td></td>
</tr>
<tr>
<td>US USA***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patent granted (to 2000)</td>
<td>6,166,785&lt;br&gt;S US6166785/PN&lt;br&gt;S USnnnnnnN/PN</td>
<td>US 6166785&lt;br&gt;US 6166785 A</td>
<td>INPADOCDB</td>
<td></td>
</tr>
<tr>
<td>Patent granted, no previous pre grant publication (from 2001)</td>
<td>US 6,200,005 B1&lt;br&gt;S US6200005/PN&lt;br&gt;S USnnnnnnN/PN</td>
<td>US 6200005 B1&lt;br&gt;USPATFULL, DWPI, CA, IFIALL, INPADOCDB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reissue (from 2001)</td>
<td>US RE37,166 E&lt;br&gt;S US37166E/PN&lt;br&gt;S USnnnnnnNE/PN</td>
<td>US 37166 E1&lt;br&gt;US 37166 E</td>
<td>INPADOCDB</td>
<td></td>
</tr>
<tr>
<td>Defensive Publication</td>
<td>T105,702&lt;br&gt;S US105702T/PN&lt;br&gt;S USnnnnnnNT/PN</td>
<td>US 105702 14&lt;br&gt;US 105702 H&lt;br&gt;US 105702 14</td>
<td>INPADOCDB</td>
<td></td>
</tr>
<tr>
<td>Statutory Invention Registration (to 2000)</td>
<td>H1,889&lt;br&gt;S US1889H/PN&lt;br&gt;S USnnnnnnNH/PN</td>
<td>US 1889 H&lt;br&gt;US 1889 H1</td>
<td>INPADOCDB</td>
<td></td>
</tr>
<tr>
<td>Type of publication</td>
<td>Printed publication</td>
<td>SEARCH</td>
<td>DISPLAY (STN format)</td>
<td>Notes</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>---------------------</td>
<td>---------</td>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>WO PCT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Chinese publication numbers and patent numbers on the printed patent specification contain a code for the type of intellectual property (1 = Patent for invention, 2 = Utility model, 3 = Design patent), the STN number format does contain this code.

** Korean publication numbers and patent numbers on the printed patent specification contain a code for the type of intellectual property (10 = Patent, 20 = Utility model, 30 = Design patent), the STN number format does not contain this code.

*** In the US databases it is possible to search with or without the appended letter for the type of document. If appended the letter is removed by SEARCH EDIT.

N – Digit, if necessary leading zeros
n – Optional digit; without leading zeros or separators.
X – Letter
YYYY – Year (may be two digits only before 2000)